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An analysis of fiscal allocations in elementary schools meeting and not meeting Ayp

William Roy Michael Barton
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AN ANALYSIS OF FISCAL ALLOCATIONS IN ELEMENTARY
SCHOOLS MEETING AND NOT MEETING AYP

by

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Bachelor of Science
University of Pittsburgh, Johnstown
1997

Master of Education
University of Nevada, Las Vegas
2000

A dissertation submitted in partial fulfillment
of the requirement for the

**Doctor of Education Degree in Educational Leadership
Department of Educational Leadership
College of Education**

**Graduate College
University of Nevada, Las Vegas
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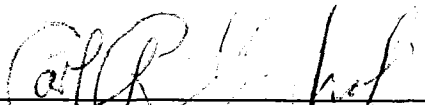
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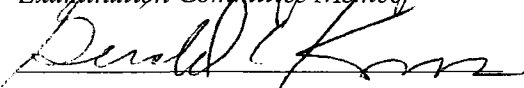

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ABSTRACT

An Analysis of Fiscal Allocations in Elementary Schools Meeting and not Meeting AYP

By

William Roy Michael Barton

Dr. Teresa S. Jordan, Examination Committee Chair
Professor of Educational Leadership
University of Nevada, Las Vegas

This study used a sequential explanatory, mixed-methods design to explore the relationship between fiscal decision making and the school improvement planning process at school sites in a large, southwestern school district and the impact those decisions and decision-making processes may have had on student achievement outcomes in elementary schools.

The methodology for the study is comprised of two research phases. Phase I included a quantitative analysis of elementary school expenditure patterns across those categories delineated in the Cooper's and Lybrand's Finance Analysis Model databank for a large urban district in the southwest. Comparisons were made across three sub-groups of elementary schools: (1) those schools meeting Adequate Yearly Progress (AYP), (2) those schools on the Watch List, and (3) those schools delineated as In Need of Improvement, as defined by the state's accountability plan for the No Child Left Behind Act. Phase II consisted of a qualitative analysis of school fiscal decision making through a series of case studies. Six schools, two from each subgroup with similar demographic characteristics, were studied.

Several researchers have made the study of school-based expenditures a priority in recent years; however, the literature in school finance has mostly concentrated on examining district or state expenditure patterns. This study focused on the former and intended to reveal how school-based fiscal decisions are, or are not, related to the school improvement planning process.

The major findings of the study included determining that school improvement was an ongoing dynamic process, and fiscal decisions were, in fact, tied to strategic academic goals in elementary schools exhibiting progress. The two functions, school improvement and fiscal decision making, did, however, occur in isolation in most instances. As a result, a limited connection existed between the two entities.

Providing information to education leaders on how schools spend their money, how they arrive at those decisions, and how those decisions are, or are not, related to school improvement efforts may assist districts in developing a better understanding of the relationship between fiscal decision making and school improvement efforts, and, ultimately, their impact on student achievement outcomes.

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DEDICATION

To my parents and grandparents who taught me the value of education and perseverance....

To my wife, Angela, who motivated me to pursue this goal and patiently supported the sacrifice in time and energy....

To my daughters, Karlie and Cassidy, who both inspire me to embrace an optimistic outlook on society, education, and the future.

CHAPTER 1

INTRODUCTION

School finance and education research in the twentieth century and up to the present has demonstrated that determining the amount of necessary funding for increased student achievement has been met with contradictory viewpoints and many unanswered questions. Linking achievement to inputs has proved to be problematic for researchers and policymakers for the past fifty years (Allen, 2001).

The renowned study by Coleman et al. (1966) asserted that schooling played a minimal part in the education or achievement of students. *Equality of Educational Opportunity* (1966), hereinafter referred to as the Coleman Report, attributed the educational success or failure of a student to outside factors that included socioeconomic status, natural ability, and other externalities not related to the daily education received in a school. As a result of Coleman's et al. (1966) findings that expenditures were not necessarily a predictor of student achievement, other researchers explored the use of production function analysis in examining the public education enterprise.

Hanushek (1996b) surmised that there was not an established relationship between educational spending and achievement. Further, according to Hanushek, education output had essentially remained constant for 25 years while education spending dramatically increased (Hanushek, 1996a). Hanushek (1996b) agreed that education is valuable to society and to the overall economic health of the nation; however, his

research and conclusions concerning the direct relationship, if any, existing between expenditures and achievement continues to be controversial.

Laine, Greenwald, & Hedges (1996) argued that school resources were systematically related to student achievement and referred to Hanushek's research as containing significant methodological flaws in the statistical analysis. Furthermore, specific studies on the correlation between expenditures and achievement revealed greater achievement or progress within lower socioeconomic or minority communities. This body of research surmised that additional funds do increase student achievement in specific groups of students (Koski & Levin, 2000).

Regardless of the two extreme sides of the issue, it has become necessary to focus on the importance of efficiency and the relationship between expenditures and achievement. The Coleman Report was scrutinized and its methodologies questioned by social scientists immediately following its release; nevertheless, Ellinger, Wright, & Hirlinger (1995) concluded that the review of the connection between the student achievement and funding literature revealed equally split results. Forty years after the release of the Coleman Report, the link between funding and student achievement has not been firmly established by researchers.

Odden (2003a) observed that the focus of school finance shifted to adequacy in the 1990s, in part, because of the "Does money matter?" issue. States, the major funding source for education, felt increased pressure to provide evidence that fiscal resources produced varying levels of achievement, output, or results (Odden, 2003b). Odden and other researchers began to find that creative funding decisions related to staffing, instructional resources, and other factors at the school site could have a positive impact

on student achievement. They made the case that the focus on expenditures should shift to an examination of school-based expenditures. Thus, the question regarding school-based expenditures shifts from “Does money matter?” to “How is money used?”

With recent legislation at the federal level, schools have encountered increased accountability and categorization as a result of state mandates. The reauthorization of the Elementary and Secondary Education Act, as amended by P.L. 107-110 (H.R. 1), hereinafter known as the No Child Left Behind Act (NCLB) of 2001, ignited landmark legislation concerning public schools across the country. Specifically, states are now fiscally mandated to implement academic standards and assessment procedures for students. Schools not meeting standards as determined by Adequate Yearly Progress (AYP) figures may be sanctioned (Goldhaber, 2002). Under NCLB, states are mandated to categorize schools according to the achievement gains or decreases of student population subgroups. Along with the stigma associated with an “In Need of Improvement” or “Watch List” categorization, schools identified with the aforementioned categories can face state takeover and reconstitution after a certain time period. Additionally, parents may transfer students out of underachieving schools.

In August 2004, a large urban school district in the Southwest reported that eighty-two schools in the district were “In Need of Improvement” while fifty-nine schools were included on the “Watch List” as a result of 2003-04 achievement data (Richmond, 2004). There has been increased pressure on these schools to make sound decisions regarding school improvement plans in order to address the improvement of student outcomes. If what Odden and others said was true, that one of the critical questions relative to the linkage between school outputs and funding is “how money is used,” then an important

question to be asked is, “How is money used to achieve school improvement efforts?” Thus, how resources are allocated within schools to achieve strategic outcomes has become of increasing research interest.

Statement of the Problem

To date there is limited understanding of the connection among school-based fiscal allocation decisions, school improvement planning and decision making, and student achievement outcomes.

Purpose of the Study

The purpose of this study was to identify school-based fiscal allocation patterns among three subgroups of elementary schools in a large urban school district and determine the relationship of those patterns to fiscal decision making and school improvement efforts.

Research Questions

The research questions for this study were:

1. How were fiscal allocations distributed among expenditure categories in elementary schools in a large urban district?
2. How were fiscal allocations distributed among expenditure categories in three subgroups of elementary schools in a large urban district?
3. What were the differences and/or similarities in expenditure patterns among the three subgroups of schools in a large urban district: those making

Adequate Yearly Progress, those on the Watch List, and those In Need of Improvement?

4. In selected case-study schools from the three subgroups of a large urban district, what was the governance structure and process for developing school budget priorities and school budgets?
5. In selected case-study schools from the three subgroups of a large urban district, what was the governance structure and process for developing school improvement plans?
6. In selected case-study schools from the three subgroups of a large urban district, what was the relationship between the school improvement planning process and the fiscal decision-making process?
7. In selected case-study schools from the three subgroups of a large urban district, what were the similarities and differences among schools in relationship to the school resource indicators taken from the extant literature?

Conceptual Framework

The conceptual framework for this study was developed from the emerging research related to the linkages between fiscal allocation decisions and educational strategies and outcomes. Koski & Levin (2000) pointed out that there were many methodological obstacles to the identification of the precise effects of school expenditures.

This study was grounded in research related to the way in which monies are allocated at the school level. Studies have looked at specific school resources or categories and

their effects on student achievement (e.g., Levin, Glass, & Meister, 1987, Odden, Archibald, & Tychsen, 1999, & Tychsen, 1999).

Previously, school-based expenditure patterns have been examined on a limited basis as compared to district and state expenditure pattern studies. For example, Verstegan (2002) offered useful ideas related to school finance restructuring by discussing the use of instructional personnel, instructional materials, equipment, suitable class size, and other resources appropriate for the curriculum; however, this discussion, related to restructuring, targeted the state funding system, not school site expenditure patterns *per se*.

Several authors viewed district-level analysis as an obstacle in identifying the linkage between fiscal decisions and educational strategies (Odden, Archibald, Fermanich, & Gross, 2002). Odden (2004) continued to assert that determining a linkage between fiscal decisions and school improvement was dependent on an analysis of expenditures at the school level, rather than an analysis of district or state expenditure decisions. Expenditure pattern comparisons among schools, rather than districts, provided data that were “significantly more diverse” (Tetreault & Picus, 1995). This diversity is in need of further study.

Several researchers have targeted the study of school-based expenditures as a priority in recent years. Specifically, Iatarola and Stiefel (2003) studied school-based expenditures through a multiple regression statistical model among a sample of elementary and middle schools in New York Public Schools. As determined by the aforementioned researchers, a lack of vertical equity and equal opportunity existed in the distribution of teacher resources among the sample of schools; moreover, the authors

contended that state education departments continued to seek a way to understand disparities in many large urban districts across the country (Iatorala & Stiefel, 2003). As well as focusing on the site fiscal data, the study in New York also concluded that school-level expenditures and the distribution of student performance were inconsistent among the individual schools.

Odden and Archibald (2000) looked at three ways in which local schools allocated resources to improve student achievement. Class size reduction, individual tutoring, and intensive professional development were all emphasized as resource allocation strategies used by elementary school sites. In addition to the aforementioned study, Odden et al. (2002) found important differences in the staffing and spending in schools with varying instructional strategies or methodologies. The most revealing differences among schools appeared in the staffing of core academic areas, student services, and non-classroom instructional staff (Odden et al., 2002).

The sixteen School Resource Indicators used by Odden et al. (2002) provided a framework to analyze school site allocation decisions. Odden et al. (2002) selected “key school descriptors” in order to provide a comprehensive perspective of the schools’ contexts and show how the individual schools implemented resources to shape their instructional programs. Odden et al. (2002) arrived at the following descriptors by collectively analyzing the resource-cost model developed by Chambers and Parrish (1994), the whole school designs that emerged in school finance in the late 1990s, and the downward accounting extension (DAE) proposed by Fowler (2001), which suggested pushing the relevant data from school district budgets to the site level. In an effort to develop a new framework to examine school-level expenditures, Odden et al. (2002)

attempted to combine the data from the aforementioned researchers with a site-level expenditure structure exhibiting increased fiscal data relevant to curriculum content areas. Additionally, this expenditure structure aimed to assess as much as possible the “educational strategy those resource-use (*sic*) reflect” (Odden et al., 2002, p. 9). Collectively, the sixteen indicators can provide a glimpse of how schools deploy resources to shape the instructional program.

Figure 1. School Resource Indicators according to Odden, Archibald, Fermanich, and Gross (2002).

1. School Building Size
2. School Unit Size
3. Low-Income Concentration
4. Percent ESL/LEP
5. Percent Special Education
6. Expenditures Per Pupil
7. Professional Development Expenditures Per Teachers
8. Special Academic Focus of School/Unit
9. Length of Instructional Day
10. Length of Class Periods
11. Length of Reading Class (Elementary)
12. Length of Mathematics Class (Elementary)
13. Reading Class Size (Elementary)
14. Mathematics Class Size (Elementary)
15. Regular Class Size (Elementary)
16. Percent Core Teachers (Math, Language Arts, Science, & Social Studies)

Summary of Methodology

This study used a two-phase, sequential explanatory mixed-methods study design, meaning that the quantitative analysis prefaced the qualitative research phase of the study (Creswell, 2003).

Phase I included a quantitative analysis of elementary school expenditure patterns across those categories delineated in the Cooper's and Lybrand's Finance Analysis Model (hereinafter known as In\$ite) 2003-04 databank for a large urban district in the southwest. This model is an example of a downward accounting model that tracks expenditures to the school site level. Comparisons were also made across three subgroups of elementary schools: (1) those schools meeting Adequate Yearly Progress (AYP), (2) those schools on the Watch List, and (3) those schools delineated as In Need of Improvement as defined by the state's accountability plan for the No Child Left Behind Act. Data were retrieved from the In\$ite database collected from schools for the state's Legislative Council Bureau.

Phase II consisted of a qualitative analysis of school fiscal decision making through a series of case studies. The cases included six selected elementary schools, two each from the three subgroups delineated in Phase I. A purposive sample of schools was matched as to school size, percent of minority students, percent of students enrolled in special education, percent of students with limited English proficiency, and percent of students eligible for free or reduced price lunch (a proxy for poverty). The purpose of the matched sample was to ensure that schools used in the case studies had similar demographic characteristics and that the primary difference among the selected schools was student achievement outcomes determined by the individual school's classification into one of the three subgroups (e.g. AYP schools, Watch List schools, or In Need of Improvement schools).

A cross-case comparative analysis was chosen to study the six elementary schools selected in the purposive sample (Stake, 2003). The case studies included gathering data

relative to Odden et al.'s (2002) School Resource Indicators outlined in the conceptual framework for this study. In addition, the case studies examined the site-specific decision-making processes associated with budgeting and the development of the schools' improvement plans. Key school site administrators and faculty who were members of the schools' budget committees and the schools' school improvement teams were interviewed. Finally, artifacts were examined including school site budgets, school improvement plans, and pertinent minutes and policies related to the school improvement and budgetary processes that took place in the schools.

Sources of Data

Data for the school site expenditure patterns were taken from the In\$ite (Coopers & Lybrand, 2003) databank, a tool for gathering and publicly reporting school-level expenditure data. In\$ite is designed to enhance fiscal accountability by providing understandable school-level spending data and improve the efficiency of schools by enabling budget analysis that leads to changes in resource allocation patterns (Tetreault, n.d.).

Data for the demographic characteristics of schools were taken from the school district's official accountability reports provided to the state department of education and the public. The determination of schools meeting AYP, on the Watch List, or In Need of Improvement was based on the categories implemented by the school district's research and accountability division as established by the state's accountability laws aligned to the No Child Left Behind Act of 2001.

Interviews with key school site personnel were tape recorded and then transcribed for later coding and analysis. Artifacts relative to school site fiscal allocation and school improvement decisions were gathered at the selected, individual case-study school sites.

Analysis of the Data

In Phase I the data analysis included statistical analysis of the In\$ite data provided for all elementary schools in the large, southwestern school district for the 2003-04 school years. First, descriptive statistics including the median, range, and percentages for the allocations were provided for the sample of elementary schools. Second, the database was disaggregated into three subgroups of schools, those meeting AYP, on the Watch List, or In Need of Improvement. After the disaggregating of the data, a simple analysis of variance (ANOVA) was done to compare the means of the varying expenditure categories in the In\$ite database. A discriminant analysis was also used to determine the predictive ability of fiscal allocation classification patterns in determining an elementary school's subgroup designation. The subgroup classification served as the criterion variable and the fiscal allocation categories served as the independent variables.

In Phase II the analysis of data concentrated on the selected case studies of six elementary schools. Strauss and Corbin (1990, 1994) proposed qualitative grounded theory inquiry as a process supporting unbiased data collection, an established technical procedure in the analysis of data, and a method of verification. Through the use of grounded theory, rigor and systematic methods of inquiry were applied to the overall process in the case studies (Creswell, 1998).

Constant comparative analysis was used to guide the data analysis. The constant comparative procedure attempted to generate and interconnect existing and emerging themes so that analysis was ongoing concerning the gathered data (Creswell, 2002).

By analyzing the taped interviews from the participants in the schools, it was the intention of the researcher to construct, through open and axial coding, themes apparent from the participants' responses. A content analysis was also employed for the artifacts to ascertain common themes and purposes. Additionally, the collected artifacts from the school sites were systematically analyzed through a framework inspired by Odden et al. (2002).

Definition of Terms

Adequate Yearly Progress (AYP) – Based on the performance of three indicators

(testing participation, academic achievement, and average daily attendance). Data must be disaggregated among nine groups in a school. The nine groups include: (1) The entire school (2) American Indians/Alaskan Natives, (3) Asians/Pacific Islanders, (4) Hispanics, (5) Blacks/African Americans, (6) Whites/ Caucasians, (7) Students with Individualized Educational Plans (IEP), (8) Students of Limited English Proficiency (LEP), and (9) Students receiving Free or Reduced Priced Lunches (FRL) (Lamitina, n.d.). Schools are judged against a set of adequate yearly progress criteria. Meeting AYP is based on performance, on assessments aligned to state content standards administered on an annual basis, and by attending specifically to the performance of the subgroups of students delineated above. Cut scores are set for test performance on English language arts and mathematics. Schools are required to have

at least 95% of their students participate on the state AYP test. In addition to subject area proficiency and participation, elementary schools must maintain an average daily attendance rate of at least 90% (La Marca, 2004).

Classroom Materials – An expenditure variable comprised of the cost for pupil-use technology/software, instructional materials, trips, and supplies (Cooper & Lybrand, LLP, 2003).

Expenditures Per Pupil – Per-pupil expenditures are calculated by dividing total school adjusted expenditures by the in-school enrollment (Cooper & Lybrand, LLP, 2003).

Face-to-Face Teaching – An expenditure variable comprised of the cost for instructional teachers, substitutes, and instructional paraprofessionals (Cooper & Lybrand, LLP, 2003).

Facilities – An expenditure variable comprised of the cost for building upkeep, utilities, and maintenance (Cooper & Lybrand, LLP, 2003).

In Need of Improvement (INOI) - Schools that have not demonstrated Adequate Yearly Progress for two consecutive years in any of the 4 AYP areas (i.e. English language arts and mathematics, test participation, and average daily attendance) are designated as In Need of Improvement (INOI). To be removed from In Need of Improvement status, a school must demonstrate Adequate Yearly Progress for two consecutive years in the area(s) designated as In Need of Improvement (Lamitina, n.d.).

Length of Class Periods – The typical length of class periods in minutes (Odden et al., 2002).

Length of Instructional Day - The number of minutes per day that students are present for instruction (Odden et al., 2002).

Length of Reading and Mathematics Class Periods – The length of elementary math and reading class periods in minutes. These include periods when students are specially grouped for extended math or literacy instruction (Odden et al., 2002).

Low-income Concentration – The percent of enrolled students eligible for the free and reduced-price lunch program (Odden et al., 2002).

Non-instructional Pupil services – An expenditure variable comprised of the cost for transportation, food service, and safety (Cooper & Lybrand, LLP, 2003).

Percent Core Teachers – For elementary schools, the percent of all licensed school staff who are regular classroom teachers (Odden et al., 2002).

Percent ESL/LEP – The percentage of students categorized as ESL or LEP (Odden et al., 2002). LEP/ESL is defined in the district under study as a student who has sufficient difficulty speaking, writing, or understanding English language as determined by the Language Assessment Scale examination (Klein, 2004).

Professional Development Expenditures Per Teacher –A school's total expenditures for professional development divided by the total number of licensed teachers, which usually includes mentors and instructional facilitators (Odden et al., 2002).

Program Support – An expenditure variable comprised of the cost for program management, therapists, psychologists, evaluation, and social work services (Cooper & Lybrand, LLP, 2003).

Progressing School – A school showing positive movement among the accountability subgroups (e.g., AYP, Watch List, In Need of Improvement) of No Child Left Behind after a one-year period.

Pupil Support – An expenditure variable comprised of the cost for guidance/counseling, library/media, extracurricular activities, and student health services (Cooper & Lybrand, LLP, 2003).

Reading and Mathematics Class Size – The average number of students per teacher in elementary math and reading classes (Odden et al., 2002).

Regular Class Size – The size of the regular, self-contained, elementary school classroom, that may be different from mathematics and reading classes if the school organizes those subjects differently, and is also different from “specials,” classes such as art, music, and physical education (Odden et al., 2002).

School Management – An expenditure variable comprised of the cost for the salaries for principals, assistant principals, and school office personnel (Cooper & Lybrand, LLP, 2003).

School Unit Size – The student enrollment of each instructional unit within a school building (e.g. “schools within schools” or small learning community designs) (Odden et al., 2002).

Special Academic Focus – The academic focus, if any, of a school. Examples include science and technology, the arts, etc. (Odden et al., 2002).

Student Enrollment – The total student enrollment of the school (Odden et al., 2002).

Teacher Support – An expenditure variable comprised of the cost for curriculum development, in-service, and support for staff development (Cooper & Lybrand, LLP, 2003).

Watch List- Schools that are in their first year of not meeting Adequate Yearly Progress (Lamitina, n.d.).

Assumptions

It is assumed that data contained in the In\$ite database were accurately reported by schools in the district and were accurately categorized programmatically by the In\$ite firm.

Limitations and Delimitations

The following limitations and delimitations are considerations when reviewing the findings of this study:

1. The expenditure data were only applicable to the large urban district under study.
2. The accountability report data used for the purposive selection of case-study schools were limited to the existing elementary schools in the district under study during the 2003-04 school year.
3. The findings of the case studies can only be generalized to the extent that the case-study schools are comparable to potential schools of comparison.
4. This study did not isolate or consider all variables that may tend to affect perceptions of the case-study participants.

Significance of the Study

Informing educational leaders of how schools spend their money, how they arrive at those decisions, and how those decisions are, or are not, related to school improvement efforts may assist districts in developing a better understanding of the relationship between fiscal decisions and school improvement decisions, and, ultimately, their impact on student achievement outcomes.

Summary

This study used a sequential explanatory, mixed-methods design to explore the fiscal allocation patterns of elementary schools and the relationship between fiscal decision making and the school improvement planning process and the impact that those decisions and processes had on student achievement outcomes in elementary schools.

CHAPTER 2

LITERATURE REVIEW

Introduction

Picus (2001) indicated that there had been “little research using school-level databases despite the potential richness of the information that is available” (p. 93). Only a few years after the aforementioned statement, the body of research associated with school-level expenditures has not significantly grown. In short, school-level data on expenditures have not been available to inform policy leaders and educational leaders on productivity issues (Isaacs, Best, Cullen, Garet, & Sherman, 1998). Odden (2004) concluded that research in the 1990s began with efforts to understand how education funds were spent, and the new millennium began only with a proposal to “track educational expenditures at the school level” (p. 7) by educational strategy or category for the educational dollars.

Despite the limited research associated with school-level expenditures, school finance researchers continue to explore methods to track expenditures to the site level. Along with the increased realization that school-level expenditures can be a rich data source in developing an understanding of the fiscal issues affecting public schools, technology and accounting mechanisms also have been developed to aid in ascertaining how dollars are used at the school site. The public interest in comparing school-level expenditures has

remained strong with twenty states requiring the reporting of school-level financial information (Fowler, 2001).

Does Money Matter?

The debate existing between two fiscal ideologies in school finance continues currently: those affirming that school funding impacts student achievement and those contending that school funding has a null effect on student gains. From 1980 to 1999, the annual amount spent on K-12 public education increased from \$97 billion to \$347 billion (NCES, 2001); however, this simple statistic related to expenditures had been the topic of contradictory viewpoints. Some have argued that this funding level increase was substantial and showed minimal achievement results while, conversely, others have argued that the expenditure increase did not account for inflation and exhibited only a modest “real” increase in funding (Hanushek, 1994).

The philosophical division related to the effects, if any, of educational expenditures has been quite substantial; however, the debate has evolved from a polarized two-sided issue with the addition of a tertiary consideration in school funding effects. As previously indicated, the issue has changed from the split idea that additional funding may or may not directly impact student achievement into the ideology professing the relevance of how school funding is used in certain areas of public schools and classrooms. Simply, the counterarguments coming from both sides of the “money making a difference issue” for nearly half a century have been met with compromise on the issue (Jefferson, 2005).

In sum, the compromise of the two standpoints reveals that money may, in fact, make a difference, if only in an analysis and determination of how the money is used. Regardless of the examination of how money is spent in education, the foundation of the concept began with the two-sided argument related to the effectiveness of educational resources (Hedges, Laine, & Greenwald, 1994).

The theoretical framework for this study was based on the realization that money may make a difference in student achievement if the funding is used appropriately and the practitioner in schools examines how money is used to garner increased student achievement and outcomes. Mortimer (1995) indicated that the focus could no longer merely be on how resources are allocated *to* schools but must be on how resources are allocated *within* schools.

Historically, the funding debate in school finance may have begun with the Coleman Report in 1966. The primary finding of the Coleman study was that school inputs, other than student body composition, explained little, if any, of the variance in student achievement (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966).

Although the findings in the Coleman Report were later criticized by other researchers (e.g., Mostellar and D.P. Moynihan, 1972) because of methodological flaws, research surrounding public school finance or improved educational opportunities continues to explore the relationship between expenditures and student outcomes. Regardless of the controversy associated with James Coleman (1966) finding that expenditures were not a predictor of student achievement, others have been in accord

with this theoretical lens. Hanushek (1996a) also found that there was little relationship between educational spending and achievement.

On the other side of this funding issue, however, remained education reformers who claimed that accomplishing more with a little more money could create long-term school improvement for high-poverty schools (Fowler, 2000). It has taken years of research and academic arguing to realize that perhaps the research community may have posed the wrong question relative to school funding and the outcomes of the institution (i.e., student achievement, test scores, and productivity).

Money may make a difference if you examine how the money is spent. Even though Hanushek (1986 & 1989) claimed that expenditure increases had not been accompanied by improvements in student performance in schools and classrooms, he implied that existing resources could be used in more effective ways to improve student achievement (Hanushek, 1996c). Furthermore, other economists realize the benefit of an educated populace. In particular, economists have begun to determine that school funding directed at students deemed at risk of under education (i.e., students of poverty, special education, limited English proficiency) requires additional funding for the students to be successful in school. Through several cost-benefit studies, researchers concluded that the additional funding for at-risk student populations, while expensive and an amount three to six times as high as average costs (Levin, 1996), was beneficial and productive for society as a whole (e.g., Barnett, 1985 & Catterall, 1987).

While economists tend to statistically analyze the inefficiency occurring in public education finance and argue that increased funding does not impact student achievement, this faction of researchers has assisted with the evolution of the question at hand

(Hanushek, 1986, 1994, 1996a, 1996b, & 1996c). As a research community, it may no longer be practical or pragmatic to determine if increased funding makes a difference in the schools across the country. As a result of the differing opinions related to increased funding, the new question related to how money is spent may supersede the previous ideology that began with Coleman (1966).

Research asserting that money does make a difference for students has increased during the last twenty years. Through the use of sophisticated software and available expenditure data, and the exclusion of special education dollars from the analysis, Cooper and Associates (1994) determined that global resource inputs (per-pupil expenditure) did impact student outcomes. While attempting to address the methodological flaws of production functions through the use of Ohio and Missouri school data, Fortune & O'Neil (1994) also concluded that a positive relationship existed between educational achievement and instructional expenditures.

In direct opposition to Hanushek's (1996a) assertion that money did not impact student achievement, Baker (1991) reanalyzed the set of databases that comprised Hanushek's database and noted that additional money for schools was an effective strategy for improving the educational system. Hedges, Laine, and Greenwald (1994) conducted a meta-analysis showing that increased per-student expenditures improved test scores; however, Hanushek (1994) asserted that their meta-analysis was flawed because of the omitted studies that demonstrated that increased expenditures had no effect.

Several other researchers also examined the effects of funding on student achievement; however, the conclusions focused on funding related more to teachers and teacher quality. While additional funding is necessary for teachers with advanced

degrees and years of experience, is it fair to connect student achievement to funding when the resources are exclusively related to personnel? MacPhail-Wilcox & King (1986) determined that teacher characteristics related positively to student performance. While the aforementioned researchers noted verbal ability as an important attribute of teachers needed to increase student achievement, they also suggested that other teacher characteristics (e.g., teacher experience, teacher salary, and professional preparation) were significantly related to student achievement. The former example, verbal ability, may be difficult to associate with fiscal resources; however, the latter examples including experience, salary, and professional preparation can be quantified and designated as fiscal resources.

In an effort to support the former work examining teacher quality, Ferguson (1991) noted positive connections between school resources and student outcomes. Specifically, he concluded that teacher quality was related to higher student achievement. Teacher quality was measured by teacher experience, education level, and the teachers' performances on a state-wide examination.

As a conclusion to the effects of funding debate that has occurred for the last fifty years and as a rebuttal to the findings of researchers focused on minimizing the effects of funding on student achievement, current research suggests that nearly all students can achieve at more advanced levels with targeted funding (Odden, Monk, Nakib, & Picus, (1995). The debate may have concluded that increased funding levels are necessary for low-ability students from low-income families to achieve; however, with the addition of funds and additional time, students with varying background knowledge and experience

can successfully perform cognitively, as compared to other students, if they are provided with challenging curriculum and appropriate instruction (Bruer, 1992 & Kennedy, 1991).

The empirical evidence related to the link between student expenditures and outcomes is inconclusive. Production function studies focused on resource patterns that are relevant in one school may not transfer or be applicable to another school (Verstegan & King, 1998). Nearly four hundred research studies have attempted to build a relationship between increased spending and student achievement (Becker, 2005) with no final determination; therefore, it is advantageous to examine the effects of *how* dollars are spent to clearly determine if money is impacting student achievement at all.

State and District Expenditures (Macro-Level)

Several research studies examining district or state expenditure data revealed the necessity to promote school-level expenditure data analysis. Pan, Smith-Hansen, Jones, Rudo, Alexander, & Kahlert (2004) investigated four states' education databases in an effort to support policy research on fiscal resource allocation. As a result of the study, the authors concluded that the inclusion of the tracking of instructional dollars at individual school sites, the micro-level, would enable policymakers and researchers to consider spending needs of schools with differing demographics and environments; thus, more diverse and larger school systems could reveal to policymakers their inherent fiscal needs with school-level expenditure data (Pan et al., 2004).

In relation to the aforementioned macro-level research that reinforced micro-expenditure ideologies, Monk, Roellke, & Brent (1996) studied instructional expenditures in the Big Five school districts in New York. Through quantitative analysis using an

expenditure database and several case studies, they concluded that the analysis of state expenditure data was limited and prevented a “more informative analysis of resource allocation patterns” (Monk et al., 1996, p. 62).

Chambers, Parrish, Goertz, Marder, & Padilla (1993) studied low-poverty and high-poverty school districts. This research was also prefaced with the realization of the authors that site-level data were not available; however, the study did begin to delve into the school-level expenditures at individual sites. While Chambers et al. (1993) did not explore accounting spreadsheets for school-level data, the authors did examine district-level expenditure patterns and the effects on individual schools. For the most part, the school-level data in this study exposed the realization that high and low revenue districts allocated resources differently between high and low poverty schools.

Hartman (1994) also studied school district expenditures to determine the spending patterns or differences that may impact student achievement. As a result of this macro-level analysis, it was determined that school districts did, in fact, have different expenditure patterns and differing spending levels. Consequently, higher spending districts employed their resources to create lower class sizes, a teacher workforce with greater experience and higher educational levels, higher teacher salaries, and more support personnel. Student achievement was higher in the districts spending more money.

A district-level analysis in the state of Oklahoma determined that schools spending more on instruction had higher test scores, and schools spending more on school administration had lower test scores (Jacques & Brorsen, 2002). By using test scores as a proxy for school quality, the aforementioned researchers claimed that money is best spent

on teachers, teacher supplies, and teacher training. While this and other district-level analyses supported additional funds for schools and introduced some of the components that could assist with greater student achievement, additional questions remained as to the particular school resources that had been identified as making a difference in pupil achievement (Verstegan & King, 1998).

In a study initiated by the Boston Public Schools in 1999, school district officials conducted an audit of its professional development expenditures. As a result of the study, the researchers in the Boston Public School District were able to ascertain that a very small percentage of the overall professional development expenditures was directed to a major reform effort of the school system (Committee for Economic Development, 2004). This district-level analysis, along with others, assisted with the move to drill down to school-level expenditure data. Districts and schools have begun to realize that they must examine how they deploy available resources at the micro-level (Committee for Economic Development, 2004).

School-Level Expenditures (Micro-Level)

For many years, it has been possible to examine the productivity of schools through the use of data from the state and district levels. School-level expenditure data have not always been readily available for interpretation and analysis. Furthermore, school-level expenditure tracking mechanisms have often been criticized for their similarity to district and state expenditure spreadsheets.

One of the first major studies on school-based expenditures was presented in 1990. Guthrie, Kirst, and Odden (1990) developed an expenditure average for elementary,

middle, and high schools in the state of California. While the data combined the figures from all three of the aforementioned levels of schooling and did not disaggregate among the three different levels of public education, the result of the study was one of the first attempts to provide expenditure data at the school level (Picus, 2001). Specifically, this seminal research related to school-level expenditures began to expose how funding within noninstructional categories was being allocated and how nonteacher expenditures were not necessarily a part of the “administrative blob,” as it related to non-instructional operations. While the data from the study provided statewide averages for California and was not precise in determining a single school’s expenditure patterns, the study revealed the percentage of the budget dedicated directly to classroom services, specialized teachers, instructional aides, site administration, staff development, and other operational categories (Odden & Picus, 2004).

Of course, more studies specifically examining school-based expenditures followed the advent of school-level resource data analysis of the early 1990s. The Consortium for Policy Research in Education, hereinafter known as CPRE, sought research regarding site-level expenditures after the organization encountered data problems in a study examining school-level data in four states. Only one state was finally able to produce site-level expenditure data (Odden & Busch, 1997).

At the time, CPRE tasked the researchers to analyze four questions related to school-level data analysis (See Figure 2).

Figure 2. CPRE questions related to school-level expenditure data.

1. What are the major questions that need to be answered by school-level fiscal and staff data?
 2. What kind of school-level data have you been able to obtain and with what difficulty or ease?
 3. What kind of data do you need but cannot obtain?
 4. What would be your recommendations for improving both types of data available at the school level, and the possibilities for collecting them?
- (Odden & Busch, 1997, p. 227).

As a result of the questions posed by CPRE, the aforementioned questions began to be addressed by many school finance researchers. Berne, Stiefel, and Moser (1997) indicated that site-level data would lead to a rich data source; however, an analysis of such data would have to be limited to certain areas determined to be necessary. Simply, the data could be overwhelming for researchers. Picus (1997), who agreed that school-level data are a rich data source, also cautioned that school-level fiscal data were difficult to obtain and also difficult to analyze. Finally, Goertz (1997) asserted that schools varied in the type and quality of data that were reported at the school level; and, at the time, only a few states and school districts had databases to track revenue and expenditures to the school level.

The Coopers and Lybrand Accounting Firm and the U.S. Chamber of Commerce also envisioned the importance of district and school-level data when they introduced a technological tool called *In\$ite: The Finance Analysis Model for Education* that tracks all

expenses and reports school system expenditures according to function, program, and grade level (Harrington-Lueker, 1996). While, at the time, In\$ite did not necessarily track down precisely to the school level, advancements have been incorporated to provide expenditure data to individual schools.

The idea behind In\$ite or the Finance Analysis Model (FAM) was to treat each school as a unit of production and analysis while also overcoming the “tyranny of averages” (Speakman, Cooper, Holsomback, May, Sampieri, & Maloney, 1997). It implied that the data provided could show the real cost structure of a school or school system. FAM data were ultimately developed to assist in determining an individual school’s equity, efficiency, and productivity by separating expenditure costs for *Function*, *Location*, and *Program* (See Figure 3). FAM provides information necessary to improve the productivity and efficiency of America’s schools when combined with test scores, attendance data, and teacher information (Speakman et al., 1997).

In\$ite or the FAM model was designed to analyze a school district’s general ledger, analyze and collect information at the school levels, and be implemented as one of the many tools to acquire site-level fiscal data.

Figure 3. Finance Analysis Model components including Functions, Locations, and Programs (1997).

FUNCTIONS:	Instruction, Instructional Support, Operations, Other Commitments, and Leadership.
LOCATIONS:	Central, School Site, and Non-Site Specific.
PROGRAMS:	Special Education, Regular Education, Bilingual, Chapters 1 & 2.

Specific studies examined site-level data according to specific functions. An analysis of Texas elementary schools indicated that expenditures for instruction, and more specifically, highly rated teachers, led to higher student achievement; conversely, payroll expenses for substitute teachers had a negative effect on student achievement (Harter, 1999). Urban elementary schools' professional development spending had also been collected and analyzed. Professional development, an important link with teacher quality, continues to be recognized as a key component for school improvement initiatives. Fermanich (2002) examined schools' discretionary funds and allocated district funds directed toward professional development. He determined that the sample elementary schools spent 7.8% of their school operating budgets for professional development.

While the results of these studies are important and reveal the site-based contribution to professional development and the effects of specific budgetary functions, they also shed light on the methodology needed when analyzing site-based funding. While In\$ite-like or FAM databases are critical in any analysis of site-level expenditures, there are limitations associated with district and school databases that consist of broad expenditure categories without specificity (Chambers, 1999). In an attempt to provide a more detailed and accurate analysis of school expenditures, Fermanich (2002) incorporated a cross-case analysis methodology of elementary schools. An increased number of site-level expenditure studies have incorporated a more robust methodology consisting of both an analysis of accounting information (e.g., FAM, In\$ite, cost-accounting) and a more in-depth site analysis of expenditures (e.g., case studies).

Miller, Roza, & Swartz (2005) proposed the shared-district-resource-cost allocation model as a method to make comparisons between resource allocation patterns and schools. In sum, the model examined the entire budget in Denver Public Schools and successfully exposed how 25 percent of the central office budget was reflected among all student types. The aforementioned study revealed which schools received shared resources and how the resources were used among student type (e.g., percent minority, percent limited English proficient, percent poverty, and percent gifted).

Site-Level Resource Allocation

Odden (2001) asserted that the process of resource allocation started with schools analyzing fiscal and achievement data to determine the efficacy of educational strategies or resources. Schools were provided with fiscal resources and were to be promoting the most effective educational strategies and resources; yet, the literature review related to site-level resource allocation methods revealed sparseness of data identifying the impacts of specific expenditures.

Townsend (1996) asserted that school-based decision making was becoming a focus of the school effectiveness literature. Even though resource allocation at the site level had been the target of increased research efforts, and researchers called for more sophisticated data at the school level, it remained important to reveal the actual percentage of the school budget deemed as discretionary. An analysis of school level data in Washington State revealed that only 5 percent of the total allocated budget to school sites was discretionary. Schools were able to control spending decisions only in the categories of classroom supplies, office supplies, health supplies, library books,

textbook replacements, and copier machines (State of Washington, 2005). Goertz & Stiefel, (1998) found that schools in four major cities had discretionary budgets of 20 percent or less.

How much of a school's total budget is discretionary, and what services or supplies may be purchased with the funds? Only a small percentage of the overall operating budget allocated to schools may be discretionary in nature. However, schools also generate funds from school-based services. While the research related to school-generated funds for elementary schools is limited, research detailing the amount of school-generated funding of high schools in the United States has been available. According to survey results directed at 1,300 principals, more than 40% of the surveyed high school principals had annual deposits into their school-generated fund accounts between \$100,000 and \$300,000 (Gonzales and Bogotch, 1999).

Of course, elementary school discretionary funds may be smaller than the aforementioned figures; nevertheless, it is important to begin to determine *how* these funds are used at the school and what equity or value-added dimensions result from these resource differences across schools (Odden et al., 2002).

As previously indicated in the first chapter of this study, the School Resource Indicators proposed by Odden et al., (2002) were a starting point for school-level analysis of how resources are allocated and expended at the school site. The following section provides an overview of how those School Resource Indicators were selected.

School Resource Indicators

The sixteen School Resource Indicators proposed by Odden et al. (2002) served as the focus of the conceptual framework for this study (See Chapter 1, p. 8). Thus, it is important to understand how the researchers came to select the specified list of School Resource Indicators.

Hartman, Bolton, & Monk (2001) determined that the downward accounting extension or databases with school expenditure data lacked student and staff data. Thus, exclusively examining accounting data may not provide the richest possible data analysis. As a result, Odden et al. (2002) focused on the perspective previously provided by several key researchers to determine the most appropriate framework highlighting school resource indicators.

Ideologies from downward accounting extension, whole school design research, and the resource cost model served as the foundation for the researchers in selecting the sixteen School Resource Indicators. The resources served the purpose of providing greater detail about school instructional strategies and were intended to supplement the fiscal information provided by schools.

Figure 4. School Resource Indicators according to Odden et al. (2002).

School Resource Indicators	
1. School Building Size	11. Length of Reading Class (Elementary)
2. School Unit Size	12. Length of Mathematics Class (Elementary)
3. Low-Income Concentration	13. Reading Class Size (Elementary)
4. Percent ESL/LEP	14. Mathematics Class Size (Elementary)
5. Percent Special Education	15. Regular Class Size (Elementary)
6. Expenditures Per Pupil	16. Percent Core Teachers *
7. Professional Development Expenditures Per Teachers	
8. Special Academic Focus of School/Unit	
9. Length of Instructional Day	
10. Length of Class Periods	
	* Math, English/Language Arts, Science, & Social Studies

In an attempt to gather information related to instructional strategies employed by individual sites, the aforementioned framework provided a “powerful analytical tool for comparing resource use and deployment across schools” (Odden et al., 2002, p.19).

Miller et al. (2005) implied that a resource-based approach, as highlighted in Figure 4, should be incorporated with an accounting approach in determining school-based expenditures. In sum, the sixteen School Resource Indicators that were developed through research promoted a systematic analysis for school-level resource allocation.

Fiscal Decision Making

Site-level fiscal decision making has emerged as an important part of the school accountability system. The principal has consistently been viewed as the key decision-maker related to finance (Goertz, 2001); however, due to the development of effective leadership strategies involving collaboration and participatory decision making, other

site-level personnel have become involved in this process. In an attempt to explain the key component of schools, specifically, restructured schools, Moore (1993) described how decision making is shared at a school site among all levels and how decisions affecting teachers must be contemplated and decided with input from the teachers themselves. Support for teachers in site-level decision making has evolved very slowly, but administrators have grown wiser in how to include teachers in the daily issues and functions at the school level (Rooney, 2004).

Hentschke (1988) indicated that a shift must occur in site-based fiscal management and that all participants must be fluent in fiscal management. According to Crampton (1990), the shift must involve budget literacy and budget construction skills. Budget literacy involves analyzing a school budget and connecting educational objectives to expenditures at the school level. Additionally, budget construction skills involve the principal, school improvement team members, and teachers in synthesizing program budgets into existing school budgets (Crampton, 1990).

While promoting budget literacy and budget construction skills at a school site, involving all of the stakeholders in the fiscal decision-making process should be a priority. Good financial management involves many participants in the process of constructing the budget and deciding upon expenditures (Inman-Freitas, 1991). Simply, a single administrator should not be responsible for making all of the expenditure decisions.

The fiscal decisions should also be made concurrently and in relationship to school improvement goals and plans. Stand-alone fiscal decisions not related to school improvement goals or to an overall vision are futile and may serve as the antithesis for

productivity of school funds. Speck & Denti (1995) recommended the addition of a Site Resource Management Team (SRMT), consisting of teachers, administrators, students and parents in the discussion of crucial budget concerns and the overall impact on the school's vision and mission. Overall, school improvement has been most successful when teachers become involved in the professional decisions of the school.

While the literature encourages that fiscal decisions be shared at the school site, Goertz (2001) found in a study comprised of New Jersey schools that only 19% of teachers at a school without a SRMT committee felt they had an influence on how their schools spend money. While in two other school districts involved in the study, 24% of the teachers knew how much money was required to implement their whole school reform model, and 31% reported that they knew how the money was being spent (Goertz, 2001).

Shared governance promotes that decisions at a school-level are made by the people affected by the decisions. Decisions related to school improvement, budget, expenditures, professional development, and pedagogy, as well as insuring the interconnection between the school improvement process and fiscal decisions being made at the site can all be elements of a shared governance process (Hallinger & Richardson, 1988). However, to date, there is little research on the actual impact of this shared governance on student outcomes.

Summary

The debate concerning the effects of expenditures on student achievement is ongoing. For the most part, there has been a shift in the research focus to *how* money is spent.

Research related to school-level expenditure allocation and tracking is in its infancy. States and local school districts are attempting to provide more specific data regarding school-level expenditures; however, the databases used for this process are continuing to be refined. Furthermore, while fiscal decisions at the school-level are being made, it is difficult to determine the extent to which stakeholders are actively involved in the process. There are scant data that delineate the continuum of involvement that exists at the school level and what, if any, impact this affords outcomes for children. There is also little information on the interactive effects of the school improvement process and site-based fiscal decision making for student achievement.

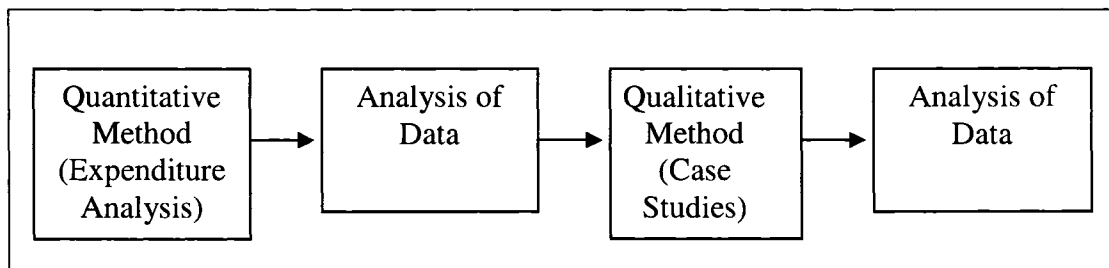
CHAPTER 3

METHODOLOGY AND RESEARCH DESIGN

This study implemented a two-phase, sequential explanatory, mixed-methods design. Both quantitative and qualitative research methods were used to analyze school-based expenditures. In addition, case studies were used to explore the connection between the school site budgetary process and school improvement planning process.

The sequential explanatory, mixed-methods design began with a quantitative analysis of expenditure data. After the completion of the expenditure analysis portion of the study, a cross-case analysis of selected school sites was initiated (See Figure 5).

Figure 5. Sequential Explanatory, Mixed-Methods Design according to Creswell (2003).



The rationale for using a sequential explanatory, mixed-methods design was two-fold. First, the use of both quantitative and qualitative methods to study the same concept expanded the analysis by utilizing methods from both research perspectives. The second

reason for the mixed-methods design was to be able to use this expanded analysis to provide a more robust description regarding the school-based expenditure patterns and decision-making processes (See Figures 6 and 7 for outlines of the research questions addressed and methods used).

Figure 6. Research question matrix for the quantitative research questions.

Research Questions	Kind of Data Collected	Process of Analysis	Literature	Time of Collection
1. How were fiscal allocations distributed among expenditure categories in elementary schools in a large urban district?	School-based expenditures among four categories and functions (In\$ite database, 2003-04)	Descriptive statistics including percentage allocation, median allocation, and range in the allocation	<ul style="list-style-type: none"> • Coopers & Lybrand (2003) • Odden et al. (2002) 	Prior to addressing any of the other research questions. (June – August, 2005)
2. How were fiscal allocations distributed among expenditure categories in three subgroups of elementary schools in a large urban district?	Disaggregated data compiled from the In\$ite database for the 2003-04 school year.	Descriptive statistics including percentage allocation, median allocation, and range in the allocation, ANOVA and discriminant analysis (Independent Variables are the fiscal allocation categories, subgroup classification is the criterion variable)	<ul style="list-style-type: none"> • Coopers & Lybrand (2003) • Creswell (2003) • Klecka (1980) • Odden et al. (2002) 	Immediately following the collection of data for research question one (August - October, 2005)
3. What were the differences and/or similarities in expenditure patterns among three subgroups of schools in a large urban district?	Disaggregated data compiled from the In\$ite database for the 2003-04 school year.	Descriptive statistics including percentage allocation, median allocation, and range in the allocation, ANOVA and discriminant analysis (Independent Variables are the fiscal allocation categories, subgroup classification is the criterion variable)	<ul style="list-style-type: none"> • Coopers & Lybrand (2003) • Creswell (2003) • Klecka (1980) • Odden et al. (2002) 	Following the distribution analysis in #2. (August -October 2005)

Figure 7. Research Question Matrix for the Qualitative Research Questions.

Research Questions	Kind of Data Collected	Process of Analysis	Literature	Time of Collection
4. In selected case-study schools from the three subgroups of a large urban district, what was the governance structure and process for developing school budget priorities and school budgets?	Interviews with principal/school members serving on the school finance/budget committee, audio tape recordings, field notes, meeting minutes	Transcription of oral text, line-by-line coding, open coding, axial coding, triangulation among data, content analysis of artifacts, grounded theory inquiry	<ul style="list-style-type: none"> • Merriam, (1998) • Creswell, (1998) • Strauss and Corbin, (1990 & 1998) 	Six to eight weeks of collection. (February – April, 2006) Ongoing analysis (March – June 2006)
5. In selected case-study schools from the three subgroups of a large urban district, what was the governance structure and process for developing school improvement plans?	Interviews with principal/school members serving on the school improvement committee, audio tape recordings, field notes, meeting minutes, school improvement plans	Transcription of oral text, line-by-line coding, open coding, axial coding, triangulation among data, content analysis of artifacts, grounded theory inquiry	<ul style="list-style-type: none"> • Merriam, (1998) • Creswell, (1998) • Strauss and Corbin, (1990 & 1998) 	Six to eight weeks of collection. (February – April, 2006) Ongoing analysis (March – June 2006)
6. In selected case-study schools from the three subgroups of a large urban district, what was the relationship between the school improvement planning process and the fiscal decision-making process?	Interviews with principal/school members serving on both the school finance/budget committee & school improvement team, audio tape recordings, field notes, meeting minutes, school improvement plans	Use of Odden et al.'s School Resource Indicator framework, comparative analysis, triangulation among data, grounded theory inquiry	<ul style="list-style-type: none"> • Merriam, (1998) • Creswell, (1998) • Strauss and Corbin, (1990 & 1998) • Odden et al., (2002) 	Six to eight weeks of collection. (February – April, 2006) Ongoing analysis (March – June 2006)
7. In selected case-study schools from the three subgroups of a large urban district, what were the similarities and differences among schools in relationship to the school resource indicators taken from the extant literature?	Interviews with principal/school members serving on the school finance/budget committee & school improvement committee, audio tape recordings, field notes, meeting minutes, school improvement plans	Comparative analysis, triangulation among data, grounded theory inquiry	<ul style="list-style-type: none"> • Merriam, (1998) • Creswell, (1998) • Strauss and Corbin, (1990 & 1998) • Odden et al., (2002) 	Six to eight weeks of collection. (February – April, 2006) Ongoing analysis (March – June 2006)

Phase I – Quantitative Analysis of Elementary School Expenditures

The initial phase of the research analyzed expenditure data from all of the elementary schools in a large southwestern district for the 2003-04 school year. Expenditure data for 173 elementary schools were statistically analyzed within each subcategory within the In\$ite databank. In an effort to develop a baseline for all the elementary schools in the school district for the year studied, descriptive statistics were first calculated. This baseline was developed by constructing a database from the In\$ite databank. Outliers were removed from the sample if the student enrollment at the school was less than 200 students. As a result of this decision rule, the elementary school sample was narrowed from 179 schools to 173 schools. The six omitted schools were outside of the metropolitan area and considered to be rural schools. More importantly, all of the removed schools exhibited the same student enrollment, thus indicating that the school district may have used a uniform minimum enrollment figure, as reported in the accountability reports, for these small, rural schools.

After compiling the databank figures from In\$ite and establishing data from the descriptive statistical analysis for the elementary schools, the sample of schools was disaggregated into three subgroups determined by state accountability requirements: schools meeting AYP, schools on the Watch List, and schools In Need of Improvement. The statistical data from all three subgroups were compared and analyzed within the expenditure categories present in the In\$ite databank.

Analysis of the Data

The In\$ite databank is a statewide school expenditure reporting system used to convey expenditure data on local schools to the community, educators, and lawmakers. In\$ite delineates school expenditure data by category as accounted for by local education agencies; therefore, expenditures are tracked down to schools within categories and subcategories so that stakeholders are aware of how school-based monies are allocated. For the 2003-04 school year, trackable expenditures were provided by In\$ite in four broad categories: *Instruction*, *Instructional Support*, *Operations*, and *Leadership*.

In addition to providing school-based expenditure figures for the four broad categories, In\$ite includes several subcategories for each of the four categories. The In\$ite databank, a downward accounting extension mechanism, also moves beyond the subcategories by providing further expenditure figures for more narrow expenditure categories at the school site.

Descriptive Statistics

The first phase of the research employed a constructed database for all of the categories and subcategories contained in the In\$ite databank to determine the statistical significance among the differences in group expenditure subcategories within the subgroups of the state accountability system: schools meeting AYP, those schools placed on the Watch List, and those schools designated as In Need of Improvement. Basic descriptive statistics were first compiled including the percentage allocation, median allocation, and range in the allocation. The median is the preferred measure of central

tendency in the descriptive analysis of school finance data because it mitigates the influence of expenditure outliers.

Analysis of Variance

A one-way analysis of variance (Creswell, 2003) was then conducted on the disaggregated group means for the eight expenditure variables. This analysis was used to determine whether or not there was a statistically significant difference among the subgroups' expenditures within the specified categories.

Discriminant analysis

Additionally, discriminant function analysis, a multivariate analysis methodology similar to multiple regressions, was used to determine which variables were the best predictors of how schools were categorized (Klecka, 1980). In sum, discriminant analysis allowed the researcher to determine which variables (e.g., expenditure category percentages) were related to the criterion variable (e.g., the classified subgroups of schools according to No Child Left Behind).

In discriminant analysis, a discriminant function is developed by using a weighted combination of those predictor variable values to classify an object into one of the criterion variable groups (Klecka, 1980). The discriminant analysis in this study was initiated by the development of a model of how best to predict to which group a school belongs. The independent variable selections may be based on previous research, a theoretical model, or intuition (Kachigan, 1991). The variables selected were based on the theoretical model for the In\$ite database. The eight subcategories of expenditure data in In\$ite thus became the independent variables for the discriminant analysis (See Figure

8 for the discriminant analysis equation and the eight selected subcategories used from In\$ite).

Figure 8. Discriminant Analysis Function and the eight expenditure subcategories used for the statistical analysis.

$$Y' = X_1 W_1 + X_2 W_2 + X_3 W_3 + \dots X_n W_n + \text{Constant}$$

Y = Discriminant Score

X_i = Independent variable i

W_i = Discriminate weight for variable I

Note. The discriminant analysis function used figures from the eight subcategories in In\$ite: Face-to Face Teaching, Classroom Materials, Pupil Support, Teacher Support, Program Support, Non-instructional Pupil Services, Facilities, and School Management.

Summary

Phase I of the study acquired and analyzed fiscal data relative to expenditures at 173 elementary schools within a large urban district. The quantitative analysis included descriptive statistics to determine the range and variation of expenditures among schools. A one-way ANOVA was used to determine if there was a statistically significant difference among how the three subgroups of schools spent their money. And finally, a discriminant analysis was performed to determine whether or not subcategories of expenditure allocations could predict which accountability subgroups a school belonged to: AYP, Watch List, or In Need of Improvement.

Phase II – Case Studies of Selected Elementary Schools

Creswell (1998) proposed five traditions of qualitative inquiry: a biography, a phenomenological study, a grounded theory study, an ethnography and a case study. This work was framed as a grounded theory study because of the components used in the analysis and overall inquiry. Strauss and Corbin (1990, 1998) proposed qualitative grounded theory inquiry as a process supporting unbiased data collection, an established technical procedure in the analysis of data, and a method of verification. Through the use of grounded theory, rigor and systematic methods of inquiry were added to the overall research process.

Grounded theory analysis was used in a case-study approach to examine individual elementary schools' expenditure patterns. The goal of the case studies was to understand “the meaning behind the actions and knowledge of the participants” (Kyburz-Graber, 2004, p. 54). As the research was conducted, the fiscal decision making of the participants relative to how money was spent in the schools was collected, noted, and analyzed. Additionally, the connection between fiscal decisions and the school improvement process was explored.

The six schools involved in the case studies were comparable in relationship to specific demographic characteristics. Only schools with enrollments between 530 and 800 students during the 2003-04 school year were included. Additionally, the schools were matched on the following set of demographic characteristics: special education, free and reduced lunch, and limited English proficiency. There were two schools from each of the disaggregated groups in the study (e.g., two schools meeting AYP, two schools on the Watch List, and two schools In Need of Improvement).

Development of the Interview Instrument and Interview Protocol

Merriam (1998) proposed three general ways to formulate an interview protocol. Interviews may be established as highly structured/formal, semi-structured, or unstructured/informal. This study used a semi-structured interview, and the researcher posed questions in a sequential order; however, participants were provided with the opportunity to elaborate openly on ideas meant to address the questions at hand.

In an attempt to minimize the possibility of threatening questions, as suggested by Bradburn & Sudman (1979), the interview protocol involved the use of open-ended questions rather than close-ended questions that may ultimately elicit responses that could be considered socially desirable by the interviewer or researcher. Furthermore, open-ended questions seem most appropriate for threatening topics (Bradburn & Sudman, 1979). While gaining the perceptions of school members regarding the connection between expenditures and the school improvement process may not necessarily be a threatening topic, site-level discussion regarding the topic may create mixed emotions and controversy on the subject.

The interviews (See Appendix A, B, & C) were conducted with each school principal and one member of each school's budget committee and school improvement team. Six schools were involved in the case studies; hence, a total of 18 people were interviewed during the field research. All interviews were recorded and transcribed. Furthermore, respondents were informed that the interviews were recorded, and that they would have an opportunity to peruse the transcribed responses several weeks after the scheduled interviews.

The case-study schools also contributed related artifacts. Meeting minutes, fiscal reports, school improvement plans, and other site-specific data sources were collected in an effort to develop a comprehensive view of processes and decision making at case-study sites.

Analysis of the Data

Green, Dixon, & Zaharlick (2003) proposed that perspective, data, methods, and theory be contrasted to make visible the often unnoticed methods of practice that guide members' actions and interactions. The goal of the qualitative portion of the study was to triangulate data through multiple perspectives and methods.

This phase of the research process used collected interview data that lead to the open and axial coding process inherent in a grounded theory study. Educative research theory (Gitlin, 1990) embraced the input, dialogue, and perspectives of traditionally excluded groups in public education. Concerning education expenditures, to this point, the focus has been on district and state expenditures, not school site expenditures. By dialoguing with staff at the case-study schools from the aforementioned groups, the intention of this study was to construct, through open and axial coding, common themes around issues of school site expenditures and the school improvement process to gain insight into how money is spent at schools and how fiscal decision are linked to school improvement efforts.

Selected schools were analyzed in accordance with standards initiated by Yin (1994) and adapted by Kyburz-Graber (2004) in case-study research. The aforementioned standards promoted rigor, validity, and reliability within the case study. Case-study design should contain the following criteria:

1. Case studies should be theoretically based and focused on research questions.
2. Triangulation is achieved by incorporating multiple sources of evidence or artifacts.
3. Evidence is designed with traceable reasons and arguments.
4. Case-study research is fully documented.
5. The final case-study report is completed through a review and rewriting process.

Themes were constructed through a systematic analysis of the interviews, cross case comparisons and a content analysis of artifacts. The case studies offered insight into the connection between fiscal decisions and school improvement decisions at selected elementary schools in the studied school district. Furthermore, comparisons between the collected case-study data were made using the School Resource Indicators framework proposed by Odden et al. (2002) in an effort to ascertain similarities and differences among the sample.

Trustworthiness

Golafshani (2003) asserted that trustworthiness, rigor, and quality are vital for qualitative research studies and that triangulation is a critical component. Bias elimination and building the researcher's truthfulness in this study were achieved by incorporating the aim of triangulation: "a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study" (Creswell & Miller, 2000, p. 126). In addition to triangulation, external audits, rich & thick description, and member checking (Creswell, 1998) were also utilized.

As a method of external auditing, the content validity of the interview protocol was established through a series of pilot interviews with teachers and principals working in

the district under study but not assigned to any of the case-study schools. These participants were familiar with educational issues and the school improvement and budgetary processes in their schools. Three retired administrators also participated in the pilot interviews to determine the clarity of the interview protocol. The purpose of the pilot was to make certain that questions were understandable and relevant to the research questions posed in the study. Pilot participants were also given the opportunity to refine questions or recommend additional questions to ensure an enhanced, rich source of data.

In addition to the district personnel, two university professors with expertise in educational leadership issues reviewed and critiqued the interview protocols. At the conclusion of the pilot, the interview protocol was refined and finalized for use with the principals and teachers in the case-study schools.

Member checking was also used as a form of verification. Participants were given the opportunity to peruse interview transcripts for accuracy. Transcripts of the interviews were promptly provided to case-study participants so that the content of the responses could be verified.

Summary

Comprehensive case studies of selected elementary schools were completed in Phase II of the study to identify the similarities and differences among schools in three different subgroups relative to the fiscal decision-making process and the connection between that process and the school-improvement-planning process. Interviews conducted at schools served as the primary data source for the case studies. Additional artifacts including meeting minutes, fiscal and school improvement reports, and field notes assisted in identifying the themes from individual schools with varying accountability categories.

Additionally, the researcher attended and observed several meetings related to fiscal decision making and the school-improvement-planning processes. These data were analyzed through the organizing lens of Odden et al.'s School Resource Indicators framework.

Using a sequential explanatory, mixed-methods design in the study addressed not only how schools allocated their fiscal resources but also how they made fiscal decisions and what connection, if any, there was between the existing school-improvement-planning process and the fiscal decision-making process.

CHAPTER 4

PHASE I - QUANTITATIVE RESEARCH FINDINGS

The intent of the first phase of this research study was to determine the relationship among expenditure patterns for elementary schools in a large urban district for the 2003-04 school year. Additionally, the goal was to compare and contrast the expenditure patterns among three subgroups of schools classified by the No Child Left Behind Act: those schools meeting AYP, schools on the Watch List, and schools In Need of Improvement.

Independent Variables

The examination of independent variables included 31 expenditure categories from the In\$ite database for the 2003-04 school year. To gain an overall picture of the expenditure patterns for all of the elementary schools (N=173), basic descriptive statistics were acquired for In\$ite expenditures and disaggregated among accountability categories.

A criterion was established to exclude outlier schools with student enrollments less than 200 students. As a result, six of the elementary schools were removed from 179 elementary schools. The schools removed from the data set also had discrepancies and input errors for the enrollment figures compiled during the 2003-04 school year. This left a total of 173 elementary schools in the data set for analysis of expenditure patterns.

Descriptive Statistics

The 31 expenditure variables were part of four broad categories including *Instruction*, *Instructional Support*, *Operations*, and *Leadership*. The eight subcategories in In\$ite included *Face-to-Face Teaching*, *Classroom Materials*, *Pupil Support*, *Teacher Support*, *Program Support*, *Non-instructional Pupil Services*, *Facilities*, and *School Management*. See Figure 9 for the broad categories and subcategories. This section focuses on the aforementioned four broad categories and the eight subcategories. Additionally, descriptive statistics for all 31 variables within each accountability category were compiled, disaggregated, and are available in Appendices D, E, F, and G.

The independent variables from the In\$ite database were first statistically analyzed through comparative descriptive statistics. In an effort to unitize the In\$ite data, the figures within each variable for all schools were converted to per-pupil dollar amounts. To begin the analysis, the descriptive statistics for the 173 elementary schools were compared to the schools within the three accountability categories (See Table 1) for total spending figures. If differences were observed among the accountability categories, this was noted.

Figure 9. In\$ite variables disaggregated by broad categories and subcategories with the variable identifiers used in the database.

Instr.	= Instruction*
Fatfa	= Face-to-Face Teaching**
IntT	= Instructional Teachers
Subs	= Substitutes
Aides	= Instructional Paraprofessionals
ClMat	= Classroom Materials**
Ptech	= Pupil-Use Technology & Software
InMat	= Instructional Materials, Trips & Supplies
Insupp	= Instructional Support*
Psup	= Pupil Support**
GC	= Guidance & Counseling
LibMe	= Library & Media
Extra	= Extracurricular
HealSer	= Student Health & Service
Tsupp	= Teacher Support**
CuD	= Curriculum Development
InseSt	= In-Service, Staff Development & Support
Prosup	= Program Support**
Proman	= Program Management
Ther	= Therapists, Psychologists, Eval, Pers Att. & Soc.Work.
Op	= Operations*
Nonins	= Non-instructional Pupil Services**
Trans	= Transportation
Food	= Food Service
Safe	= Safety
Fac	= Facilities**
Build	= Building Upkeep, Utilities & Maintenance
Lead	= Leadership*
Schman	= School Management**
Prin	= Principals & Assistant Principals
SchOf	= School Office

Note. A single asterisk indicates that the expenditure variable is one of the four broad In\$ite categories. Two asterisks denote that the expenditure variable is one of the eight subcategories in the In\$ite database. Variables without asterisks are subcategories of the eight In\$ite variables.

Table 1. Descriptive statistics for total spending (per pupil) among all schools compared to the sample of schools within the three accountability categories.

Total Spending Per Pupil	Descriptive Statistics	All Schools (N=173)	AYP Schools (N=124)	Watch Schools (N=23)	Needs Schools (N=26)
	Mean	5989.66	5890.00	5604.44	6805.73
	Median	5713.69	5647.12	5482.31	6348.66
	Variance	1096715.17	908162.99	646647.32	1629805.04
	Std. Deviation	1047.24	952.98	804.14	1276.64
	Minimum	3004.78	4584.28	3004.78	5317.06
	Maximum	9910.46	9910.46	7281.18	9364.49
	Range	6905.68	5326.18	4276.41	4047.42

The descriptive statistics for the total spending by per-pupil variable revealed a difference in mean spending from \$5,604 to \$6,806 during the 2003-04 school year. The sample of schools deemed as In Need of Improvement spent the most per pupil when compared to the total number of schools and the other subgroups.

As with the total spending of schools, in all of the four broad categories, the In Need of Improvement schools spent significantly more than the other accountability groups and the entire sample (See Table 2). The *All Schools* sample exhibited the second highest mean for the four broad categories in InSite. The AYP schools and Watch List schools varied in ordinal mean placement among the four broad categories. The descriptive statistics for the eight subcategories were then compared among all schools and the three accountability subgroups (See Table 3).

The descriptive analysis for the eight subcategories revealed that schools categorized as In Need of Improvement spent more per pupil when compared to all schools in the

sample and the other accountability subgroups. Additionally, the proportion of the expenditures, as revealed in the pie graphs (See Figure 10), showed that each accountability subgroup had similar proportions for the eight In\$ite expenditure variables. The only proportional difference greater than 2% was observed between the Watch List schools and the In Need of Improvement schools in the *Classroom Materials* expenditure category.

Table 2. Descriptive statistics for the Instruction, Instructional Support, Operations, and Leadership variables among all schools and the schools within the three accountability categories.

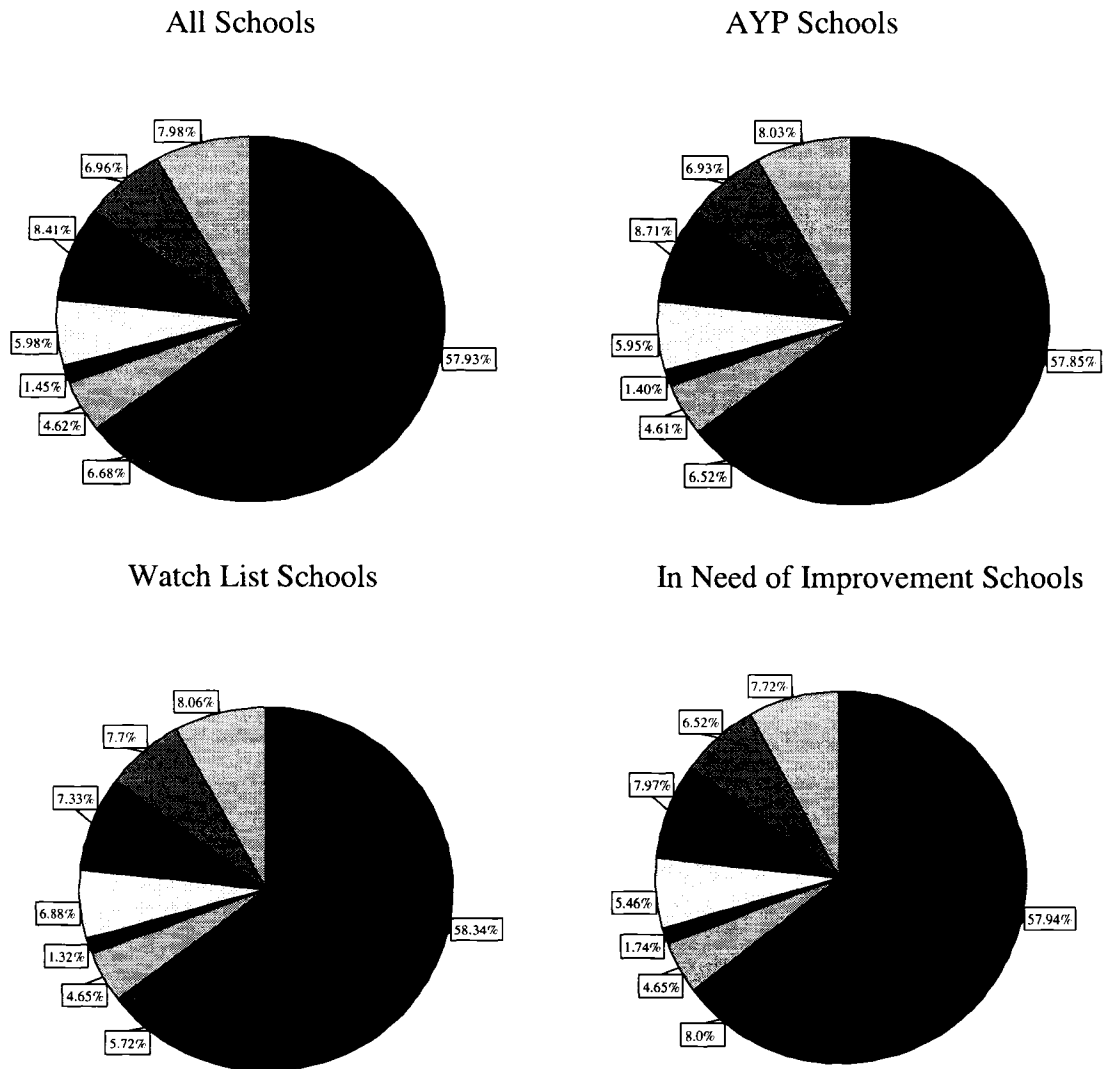
Main InSite Expenditure Categories	Descriptive Statistics	All Schools (N=173)	AYP Schools (N=124)	Watch Schools (N=23)	Needs Schools (N=26)
Instruction	Mean	3869.43	3791.62	3590.33	4487.41
	Median	3672.84	3608.08	3538.83	4135.01
	Variance	513559.30	406224.26	226983.59	836041.18
	Std. Deviation	716.63	637.36	476.43	914.35
	Minimum	2184.97	2971.58	2184.97	3446.63
	Maximum	6515.48	6515.48	4624.09	6011.25
	Range	4330.51	3543.90	2439.12	2564.62
	Instructional Support	Mean	721.62	704.06	720.23
Median		691.83	675.01	737.29	772.59
Variance		35741.38	34052.26	17864.70	53606.07
Std. Deviation		189.05	184.53	133.66	231.53
Minimum		311.45	311.45	463.13	338.67
Maximum		1446.76	1446.76	986.55	1176.34
Range		1135.31	1135.31	523.43	837.66
Operations		Mean	920.53	921.31	842.25
	Median	838.00	810.89	846.08	938.84
	Variance	77334.51	90584.49	29989.87	49885.12
	Std. Deviation	278.09	300.97	173.18	223.35
	Minimum	293.16	587.63	293.16	701.59
	Maximum	2180.69	2180.69	1180.33	1614.98
	Range	1887.53	1593.05	887.17	913.39
	Leadership	Mean	478.08	473.01	451.63
Median		466.32	460.92	458.88	511.95
Variance		11538.66	10240.71	17422.00	10545.72
Std. Deviation		107.42	101.20	132.00	102.69
Minimum		63.52	315.24	63.52	345.18
Maximum		1081.13	1081.13	633.59	756.49
Range		1017.62	765.89	570.08	411.32

Table 3. Descriptive statistics for the eight sub-variables among all schools and the schools within the three accountability categories.

In\$ite Expenditure Sub-categories	Descriptive Statistics	All Schools (N=173)	AYP Schools (N=124)	Watch Schools (N=23)	Needs Schools (N=26)
Face-to-Face Teaching	Mean	3469.58	3407.37	3269.84	3942.98
	Median	3313.31	3296.71	3240.61	3623.37
	Variance	331114.69	262906.67	190286.34	528148.57
	Std. Deviation	575.43	512.74	436.22	726.74
	Minimum	2068.40	2664.64	2068.40	3100.76
	Maximum	5419.30	5419.30	4258.56	5255.12
	Range	3350.90	2754.66	2190.16	2154.37
	Classroom Materials	Mean	399.85	384.25	320.49
Median		309.47	305.59	314.18	649.75
Variance		33006.15	27668.81	3848.84	58821.10
Std. Deviation		181.68	166.34	62.04	242.53
Minimum		116.57	197.45	116.57	237.48
Maximum		1096.18	1096.18	428.87	842.36
Range		979.61	898.73	312.30	604.88
Pupil Support		Mean	276.70	271.36	260.48
	Median	264.93	262.19	268.36	305.15
	Variance	1677.22	971.27	1147.92	3719.40
	Std. Deviation	40.95	31.17	33.88	60.99
	Minimum	119.02	227.02	119.02	236.37
	Maximum	476.32	388.49	290.78	476.32
	Range	357.31	161.46	171.76	239.96
	Teacher Support	Mean	86.64	82.32	74.14
Median		71.22	70.72	68.90	99.65
Variance		1818.65	1395.76	279.67	4120.81
Std. Deviation		42.65	37.36	16.72	64.19
Minimum		23.53	29.05	50.37	23.53
Maximum		309.91	309.91	121.50	252.53
Range		286.39	280.87	71.13	229.00

InSite Expenditure Sub-categories	Descriptive Statistics	All Schools (N=173)	AYP Schools (N=124)	Watch Schools (N=23)	Needs Schools (N=26)
Program Support	Mean	358.28	350.38	385.61	371.78
	Median	341.21	329.21	396.09	365.00
	Variance	21101.71	21782.25	10429.51	27646.49
	Std. Deviation	145.26	147.59	102.12	166.27
	Minimum	34.55	34.55	217.94	51.28
	Maximum	1004.02	1004.02	590.47	819.37
	Range	969.47	969.47	372.54	768.09
	Non-instructional Pupil Services	Mean	503.78	512.97	410.64
Median		431.96	429.71	381.06	515.49
Variance		49194.81	59716.73	17329.52	19456.01
Std. Deviation		221.80	244.37	131.64	139.48
Minimum		110.23	243.07	110.23	348.60
Maximum		1585.41	1585.41	721.07	770.01
Range		1475.18	1342.34	610.84	421.41
Facilities		Mean	416.75	408.33	431.61
	Median	400.59	378.77	435.27	416.77
	Variance	12717.68	12539.00	6525.92	18751.83
	Std. Deviation	112.77	111.98	80.78	136.94
	Minimum	182.93	231.39	182.93	278.20
	Maximum	983.55	952.52	593.32	983.55
	Range	800.62	721.13	410.39	705.35
	School Management	Mean	478.08	473.01	451.63
Median		466.32	460.92	458.88	511.95
Variance		11538.66	10240.71	17422.00	10545.72
Std. Deviation		107.42	101.20	132.00	102.70
Minimum		63.52	315.24	63.52	345.18
Maximum		1081.13	1081.13	633.59	756.49
Range		1017.62	765.89	570.08	411.32

Figure 10. Proportion of the eight variable In\$ite expenditures for all elementary schools (N=173), schools meeting AYP (N=124), schools on the Watch List (N=23), and schools In Need of Improvement (N=26).



Note. Counter clockwise from largest part.

- Face-to-Face Teach
- Program Support
- Classroom Materials
- Non-instructional
- Pupil Support
- Facilities
- Teacher Support
- School Management

Analysis of Variance (ANOVA) – Eight In\$ite Variables

The next part of the analysis consisted of a simple, one-way analysis of variance (ANOVA) comparing the means for the eight subcategories of expenditure variables and the categorical independent variable for accountability (e.g., AYP, Watch List, and In Need of Improvement). The ANOVA was followed by the Tukey *a*, a post-hoc test of significance. The Tukey *a* analyzes possible pairwise comparisons in the sample.

The net effect of using the Tukey *a* is that a larger difference between means is necessary to declare significance. Furthermore, a major limitation associated with a simple, one-way ANOVA is that researchers do not know how the means differ; a post-hoc test can address how means differ after the ANOVA determines a statistical difference.

In the following sections, the results of the ANOVA analysis and the post-hoc test were organized by the eight subcategories from the In\$ite database: *Face-to-Face Teaching, Classroom Materials, Pupil Support, Teacher Support, Program Support, Non-instructional Pupil Services, Facilities, and School Management*. Tables 4 through 7 display post-hoc results from significant F values. Tables 8 through 10 display the F value tables.

Instruction: Face-to-Face Teaching

The simple, one-way ANOVA determined that the *Face-to-Face Teaching* independent variable was significantly different between groups with an F ratio of 11.85 which is statistically significant ($p < .0001$). *Face-to-Face Teaching* incorporated salaries and related employment costs for teachers who consistently interacted with

pupils. Additionally, the *Face-to-Face Teaching* variable included substitutes and paraprofessionals who worked directly with students in the classroom.

Table 4 displays the post-hoc test confirming the ANOVA findings for the *Face-to-Face Teaching* expenditure variable. The Tukey *a* post-hoc method showed that significant differences existed between schools meeting AYP and schools deemed as In Need of Improvement. Similarly, the post-hoc results exhibited significant difference between schools on the Watch List and schools considered In Need of Improvement.

Table 4. Face-to-Face variable ANOVA results and post-hoc comparisons among accountability groups.

	(I) AYP Des	(J) AYP Des	Mean Difference (I-J)	Std. Error	Sig.
Tukey <i>a</i>	1	2	137.53398	122.78856	.503
		3	-535.60432(*)	116.66004	.000
	2	1	-137.53398	122.78856	.503
		3	-673.13830(*)	154.81800	.000
	3	1	535.60432(*)	116.66004	.000
		2	673.13830(*)	154.81800	.000

Note. The asterisks indicate that the difference between accountability categories is significantly different at the <.05 level. AYP Des “1” stands for the sample of schools meeting AYP. AYP Des “2” is the indicator for schools on the Watch List, and AYP Des “3” is for the sample of schools In Need of Improvement. Bolded numbers indicate statistical significance. The column of data labeled Mean Difference (I-J) presents the results of subtracting the minor row variable mean (J) from the major row mean (I).

Of the subcategories of *Face-to-Face Teaching* all three showed statistically significant differences among the accountability subgroups. The subcategories were *Instructional Teachers, Substitutes, and Instructional Paraprofessionals*. The In Need of Improvement subgroup spent more than the other subgroups in all three of these categories. Refer to Appendix H for the detailed analysis on the subcategories for *Face-to-Face Teaching*.

Instruction: Classroom Materials

The simple, one-way ANOVA determined that the *Classroom Materials* independent variable was significantly different between groups with an F ratio of 12.62 which is statistically significant ($p < .0001$). The *Classroom Materials* subcategory incorporated technology and software that students used and the salaries and employment cost of staff dedicated to technology instruction. Additionally, the subcategory included the cost of instructional materials and supplies. Specific materials included textbooks, paper, lab materials, test forms, workbooks, chalk, markers, maps, and charts.

Table 5 displays the post-hoc test confirming the ANOVA findings for the *Classroom Materials* expenditure variable. The post-hoc method illustrated significant differences between schools meeting AYP and schools deemed as In Need of Improvement. Similarly, the post-hoc results exhibited significant difference between schools on the Watch List and schools considered In Need of Improvement.

Table 5. Classroom Materials variable ANOVA results and post-hoc comparisons among accountability groups.

	(I) AYP Des	(J) AYP Des	Mean Difference	Std. Error	Sig.
			(I-J)		
Tukey a	1	2	63.75796	38.77333	.230
		3	-160.19080(*)	36.83811	.000
	2	1	-63.75796	38.77333	.230
		3	-223.94876(*)	48.88736	.000
	3	1	160.19080(*)	36.83811	.000
		2	223.94876(*)	48.88736	.000

Note. The asterisks indicate that the difference between accountability categories is significantly different at the <.05 level. AYP Des “1” stands for the sample of schools meeting AYP. AYP Des “2” is the indicator for schools on the Watch List, and AYP Des “3” is for the sample of schools In Need of Improvement. Bolded numbers indicate statistical significance. The column of data labeled Mean Difference (I-J) presents the results of subtracting the minor row variable mean (J) from the major row mean (I).

Of the two subcategories of *Classroom Materials* both showed statistically significant differences among the accountability subgroups. The subcategories were *Pupil-Use Technology & Software* and *Instructional Materials-Trips & Supplies*. The In Need of Improvement subgroup spent significantly more than the other accountability subgroups in the aforementioned categories. Refer to Appendix H for the detailed analysis on the subcategories for *Classroom Materials*.

Instructional Support: Pupil Support

The simple, one-way ANOVA determined that the *Pupil Support* independent variable was significantly different between groups with an F ratio of 17.61 which is statistically significant ($p < .0001$). *Pupil Support* incorporated four subcategories including counseling, library services, extracurricular activities, and health-related services. More specifically, the subcategory included the salaries of guidance counselors, librarians, coaches, and nurses.

Table 6 displays the post-hoc tests confirming the ANOVA findings for the *Pupil Support* expenditure variable. The post-hoc method showed that significant differences existed between schools meeting AYP and schools deemed as In Need of Improvement. Similarly, the post-hoc results illustrated significant difference between schools on the Watch List and schools considered In Need of Improvement.

Table 6. Pupil Support variable ANOVA results and post-hoc comparisons among accountability groups.

	(I) AYP Des	(J) AYP Des	Mean Difference (I-J)	Std. Error	Sig.
Tukey <i>a</i>	1	2	10.88131	8.48944	.407
		3	-45.14202(*)	8.06572	.000
	2	1	-10.88131	8.48944	.407
		3	-56.02333(*)	10.70391	.000
	3	1	45.14202(*)	8.06572	.000
		2	56.02333(*)	10.70391	.000

Note. The asterisks indicate that the difference between accountability categories is significantly different at the $<.05$ level. AYP Des "1" stands for the sample of schools

meeting AYP. AYP Des “2” is the indicator for schools on the Watch List, and AYP Des “3” is for the sample of schools In Need of Improvement. Bolded numbers indicate statistical significance. The column of data labeled Mean Difference (I-J) presents the results of subtracting the minor row variable mean (J) from the major row mean (I).

Two of the four subcategories of *Pupil Support* showed statistically significant differences among the accountability subgroups. The subcategories displaying statistical significance were *Guidance & Counseling* and *Student Health & Service*. The In Need of Improvement school subgroup spent substantially more in these two categories when compared to the AYP and Watch List schools. Refer to Appendix H for the detailed analysis on the subcategories for *Pupil Support*.

Instructional Support: Teacher Support

The simple-one way ANOVA determined that the *Teacher Support* independent variable was significantly different between groups with an F ratio of 9.93 which is statistically significant ($p < .0001$). The *Teacher Support* variable incorporated three subcategories including curriculum development, staff development, and sabbaticals. This category included the salaries and related employment costs of staff assigned to improving curriculum or pedagogy among teachers. Additionally, the cost of in-service training was also included in *Teacher Support*.

Table 7 displays the post-hoc test confirming the ANOVA findings for the *Teacher Support* expenditure variable. The post-hoc method showed that significant differences existed between schools meeting AYP and schools deemed as In Need of Improvement.

Similarly, the post-hoc results disclosed significant difference between schools on the Watch List and schools considered In Need of Improvement.

Table 7. Teacher Support variable ANOVA results and post-hoc comparisons among accountability groups.

	(I) AYP Des	(J) AYP Des	Mean Difference (I-J)	Std. Error	Sig.
Tukey <i>a</i>	1	2	8.18536	9.22780	.649
		3	-35.96969(*)	8.76723	.000
	2	1	-8.18536	9.22780	.649
		3	-44.15506(*)	11.63487	.001
	3	1	35.96969(*)	8.76723	.000
		2	44.15506(*)	11.63487	.001

Note. The asterisks indicate that the difference between accountability categories is significantly different at the <.05 level. AYP Des “1” stands for the sample of schools meeting AYP. AYP Des “2” is the indicator for schools on the Watch List, and AYP Des “3” is for the sample of schools In Need of Improvement. Bolded numbers indicate statistical significance. The column of data labeled Mean Difference (I-J) presents the results of subtracting the minor row variable mean (J) from the major row mean (I).

Of the subcategories of *Teacher Support* one showed statistically significant differences among the accountability subgroups. The subcategory displaying significance was *In-Service, Staff Development & Support* for the In Need of Improvement schools; that is, the In Need of Improvement schools spent more money on

professional development than the other two subcategories of schools. Refer to Appendix H for the detailed analysis on the subcategories for *Teacher Support*.

Instructional Support: Program Support

The simple, one-way ANOVA determined that the *Program Support* independent variable was not significantly different between groups with an F ratio of .700 which is not statistically significant. *Program Support* incorporated two subcategories inclusive of salaries and employment costs of staff that developed and maintained defined categorical programs (e.g., Special Education, Title I, General Education). A post-hoc test was unnecessary as a result of the *Program Support* variable not displaying significance levels less than .05 (See Table 8).

Table 8. One-way, simple ANOVA results of Program Support InSite variable.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29665.800	2	14832.900	.700	.498
Within Groups	3599828.450	170	21175.461		
Total	3629494.250	172			

Note. Significance level determined as higher than .05 for the Program Support variable in InSite.

Operations: Non-instructional Pupil Services

The simple, one-way ANOVA determined that the *Non-instructional Pupil Services* independent variable was not significantly different between groups with an F ratio of

2.57 which is not statistically significant. *Non-instructional Pupil Services* included transportation costs, food service costs, and the salaries of safety personnel or cost of safety devices and maintenance. A post-hoc test was unnecessary as a result of the *Non-instructional Pupil Services* variable not displaying significance levels less than .05 (See Table 9).

Table 9. One-way, simple ANOVA results of *Non-instructional Pupil Services InSite* variable.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	248699.200	2	124349.600	2.574	.079
Within Groups	8212807.334	170	48310.631		
Total	8461506.534	172			

Note. Significance level determined as higher than .05 for the *Non-instructional Pupil Services* variable in *InSite*.

Operations: Facilities

The simple, one-way ANOVA determined that the *Facilities* independent variable was not significantly different between groups with an F ratio of 1.51 which is not statistically significant ($p < .0001$). *Facilities* incorporated the costs associated with running the day-to-day operations of facilities. Specifically, utilities, desks, chairs, furniture, and fixtures were part of the subcategory. Additionally, salaries for custodians

and maintenance workers were included. Post-hoc tests were unnecessary as a result of the *Facilities* variable not displaying significance levels less than .05 (See Table 10).

Table 10. One-way, simple ANOVA results of Facilities In\$ite variable.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32777.205	2	16388.602	1.293	.277
Within Groups	2154663.205	170	12674.489		
Total	2187440.410	172			

Note. Significance level determined as higher than .05 for the Facilities variable in In\$ite.

Leadership: School Management

The simple, one-way ANOVA determined that the *School Management* independent variable was significantly different between groups with an F ratio of 3.43 which is statistically significant ($p < .0001$). *School Management* incorporated the salaries of principals and assistant principals. Additionally, the salaries for administrative support staff for principals and assistant principals were also included, as well as the basic administrative costs of running a school (e.g., office supplies).

Table 11 displays the post-hoc test confirming the ANOVA findings for the *School Management* expenditure variable. The Tukey *a* post-hoc method indicated significant differences between schools on the Watch List and schools deemed as In Need of Improvement.

Table 11. School Management variable ANOVA results and post-hoc comparisons among accountability groups.

	(I) AYP Des	(J) AYP Des	Mean Difference		
			(I-J)	Std. Error	Sig.
Tukey a	1	2	21.38095	24.04262	.648
		3	-52.63969	22.84262	.058
	2	1	-21.38095	24.04262	.648
		3	-74.02064(*)	30.31415	.041
	3	1	52.63969	22.84262	.058
		2	74.02064(*)	30.31415	.041

Note. The asterisks indicate that the difference between accountability categories is significantly different at the <.05 level. AYP Des “1” stands for the sample of schools meeting AYP. AYP Des “2” is the indicator for schools on the Watch List, and AYP Des “3” is for the sample of schools In Need of Improvement. Bolded numbers indicate statistical significance. The column of data labeled Mean Difference (I-J) presents the results of subtracting the minor row variable mean (J) from the major row mean (I).

Of the two subcategories of *School Management* one showed statistically significant differences among the accountability subgroups. The subcategory showing statistical significance was *School Office*. There was variation in spending among all accountability subgroups of schools. Schools In Need of Improvement spent more in this category as compared to the other groups. The Watch List schools spent the least per pupil when compared to other accountability subgroups. Refer to Appendix H for the detailed analysis on the subcategories for *School Management*.

Discriminant Analysis

Discriminant analysis was conducted to assess whether the eight expenditure categories from the In\$ite database could distinguish the three groups delineated by the No Child Left Behind Act. Wilks' lambda was significant at the .001 level for the first discriminant function (DF1), $p < .001$, which indicated that the model including the eight In\$ite variables was able to significantly discriminate the three groups. However, the second discriminant function (DF2), uncorrelated with the first function in the discriminant analysis, yielded a Wilks' lambda at the $p < .320$ level, which indicated that the second model did not significantly discriminate the three groups.

The first function (DF1) was the most powerful differentiating dimension. The variables that loaded for DF1 were variables that were directly connected with instructionally-based expenditures. Table 12 presents the standardized coefficients, which suggests that when using monetary predictors, *Pupil Support (Psup_PP)* and *Face-to-Face Teaching (Fatfa_PP)* contributed most to distinguishing among the three accountability subgroups for No Child Left Behind. The classification results showed that the model correctly predicted 50% of the schools meeting AYP, 70% of the schools on the Watch List, and 62% of the schools In Need of Improvement (See Table 12). Table 12 also shows the standardized function coefficients or the contribution that each variable lends to the predictive model (See Appendix I for DF1 data).

The figures for correlation between variables and discriminant functions (See second column in Table 12) determined the correlation between the variables and DF1. The correlation figures support the premise that instructionally-based variables were correlated highly with the established discriminant function (DF1).

Table 12. Standardized Function Coefficients and Correlation Coefficients for the eight In\$ite variables in DF1 and classification results for the cases.

Subcategory Variables	Standardized Function Coefficients*	Correlation between variables and discriminant function
Psup_PP	.93	.86
Fatfa_PP	.44	.71
SchMan_PP	.25	.39
CIMat_PP	-.02	.72
Nonins_PP	-.03	.23
Tsupp_PP	-.22	.63
Prosup_PP	-.33	.02
Fac_PP	-.35	.14

		AYP Des	Predicted Group Membership			Total
			1	2	3	
Original	Count	1	62	42	20	124
		2	7	16	0	23
		3	7	3	16	26
%		1	50.0	33.9	16.1	100.0
		2	30.4	69.6	.0	100.0
		3	26.9	11.5	61.5	100.0

Note. An asterisk indicates that the column demonstrates how heavily each variable was weighted. Additionally, 54.3% of the original grouped cases were correctly classified.

Summary

The first phase of this research study included a statistical analyses of the In\$ite data. The descriptive statistics revealed that schools determined to be In Need of Improvement demonstrated higher mean per-pupil expenditure figures when compared to all schools in the district, schools meeting AYP, and schools on the Watch List. Specifically, the In Need of Improvement schools spent nearly \$1,000 more than all of the other subgroups. This was the result of increased funding in all four broad categories of *Instruction*, *Instructional Support*, *Operations*, and *Leadership*. More specifically, the schools

categorized In Need of Improvement spent more per pupil when compared to the other subgroups in seven of the eight subcategory expenditure variables in In\$ite. The only exception was the *Program Support* subcategory expenditure variable. The Watch List schools spent more than the In Need of Improvement schools in this instance.

The one-way, simple ANOVA results, with a Tukey *a* post-hoc test, revealed that significant differences existed among five of the eight subcategories within the In\$ite database. Specifically, *Face-to-Face Teaching*, *Classroom Materials*, *Pupil Support*, *Teacher Support*, and *School Management* were determined as significantly different between groups. The one-way, simple ANOVA post-hoc results also showed in what way the differences were significant among the accountability subgroups. With the exception of *School Management*, all of the aforementioned expenditure categories revealed significant difference between the schools meeting AYP and the schools In Need of Improvement. The ANOVA post-hoc results also revealed that all five categories, *Face-to-Face Teaching*, *Classroom Materials*, *Pupil Support*, *Teacher Support*, and *School Management*, were significantly different when comparing Watch List and In Need of Improvement schools. None of the five categories were statistically significant when comparing Watch List and AYP schools.

A discriminant analysis determined standardized function coefficients for the eight major subcategories of the In\$ite database. The procedure found that three of the eight subcategories held positive coefficient weights, and those variables contributed the most to statistically determining group membership within the three accountability subgroups for No Child Left Behind. The three strongest contributing variables from greatest to least included *Pupil Support*, *Face-to-Face Teaching*, and *School Management*. In other

words, how subgroups spent money for items within the three aforementioned InSite categories predicted membership within an accountability subgroup.

CHAPTER 5

CASE STUDIES

Purpose

The purpose of these case studies was to identify the specific practices that reflected the budget and fiscal decision-making processes and the school improvement planning and implementation processes at selected elementary school sites. The research explored the individual school processes and determined what, if any, linkages existed between the school improvement planning process and the fiscal decision-making process.

Sample

Six elementary schools in a school district in the southwest served as the sample. Participants included six principals, six teachers/staff members who had served on the school improvement teams, and six teachers/staff members who had served on the school budget committees; one from each school. Schools with student enrollments between 530-800 students during the 2003-04 school year were included in the case studies. The purposive sample of case-study schools was matched in relationship to selected demographic characteristics. Those characteristics included percent of special education students, percent of students who qualified for free or reduced priced lunch, and percent of students who were limited English proficient. There were two schools from each of

the three accountability classifications of schools (See Table 13 for the selected demographic characteristics).

Table 13. Demographic characteristics used to develop the purposive sample of schools.

Case-Study Schools						
	AYP		WATCH		NEEDS	
Name of School	Flower	Fields	Palm	Evergreen	Ocean	Bay
Percent Special Education	11%	13%	12%	9%	11%	11%
Percent Free or Reduced Lunch	38%	52%	57%	63%	72%	62%
Percent ESL/LEP	20%	33%	12%	49%	43%	30%

Each of the next three chapters is comprised of two case studies representing one of the three accountability classifications, schools meeting Adequate Yearly Progress (AYP), schools on the Watch List, and schools In Need of Improvement. Fictitious school names were used in the case studies. Likewise, the names of principals and teachers were changed.

Constructed Themes

After the interviews were transcribed, the verbatim text was sorted and ordered, thus leading to several readings of the narrative data. An open coding process led to the following six constructed themes.

Theme 1 – Principal’s role

Theme 2 – Shared vision

Theme 3 – Structure for decision making

Theme 4 – Context for decision making

Theme 5 – Adequacy of funds

Theme 6 – Principal’s technical knowledge of fiscal issues

These six constructed themes served as a framework for the case-study analysis of the schools within the three accountability categories. As a result of the constructed themes, one-dimensional typologies were constructed to show the case-study schools’ placement on a continuum.

An external audit was conducted to validate the scale placements. Three experienced school leaders were asked to read the case studies and score blank typologies. Then the scale placements of the three school leaders were compared with those of the researcher. The school leaders scored in the approximate area of the researcher, thus the validity of the typologies was strengthened.

Theme 1 – Principal’s Role

This theme focused on the style of the principal at each of the elementary schools. The principal’s role was viewed on a continuum between authoritative to collaborative. Several of the interviews and site visits revealed some of the principals in the elementary schools exercising great discretion on how funding was expended at the school site. Leadership styles varied across the sample of schools. Some principals were the primary decision-makers while others shared the decision making with teachers and staff (See Figure 11 for the one-dimensional typology).

Theme 2 – Shared Vision

This theme concentrated on the extent to which all staff members were aware of the school improvement goals. Variation existed among the schools in regard to the participants' awareness of both the school's goals and the school improvement process itself. Some schools had personnel at all levels (e.g., administrative, teachers, support personnel) that were fully aware of the goals. Other school staff members were not aware of or accurate in reporting the school's targeted improvement goals. The theme determined if there was clear knowledge and understanding of the school improvement process by both principal and staff (See Figure 11 for the one-dimensional typology). The shared vision theme also provided insight into whether there was a disconnect between the staff's and leader's understanding of the action steps or direction of school improvement efforts.

Theme 3 – Structure for Decision Making

This theme focused on the governance structure for making both budget and school improvement decisions. It looked at whether or not there were SIT and budget committees operating at the school site (See Figure 11 for the two one-dimensional typologies).

Theme 4 – Context for Decision Making

The context for decision making theme involved examining to what extent school personnel at case-study schools had awareness of fiscal decisions and the input level provided to staff. Additionally, the theme explored the extent to which school personnel were aware of SIT decisions and the input they had. The theme also explored the degree

of articulation between the SIT process and the budgetary process (See Figure 11 for the five one-dimensional typologies).

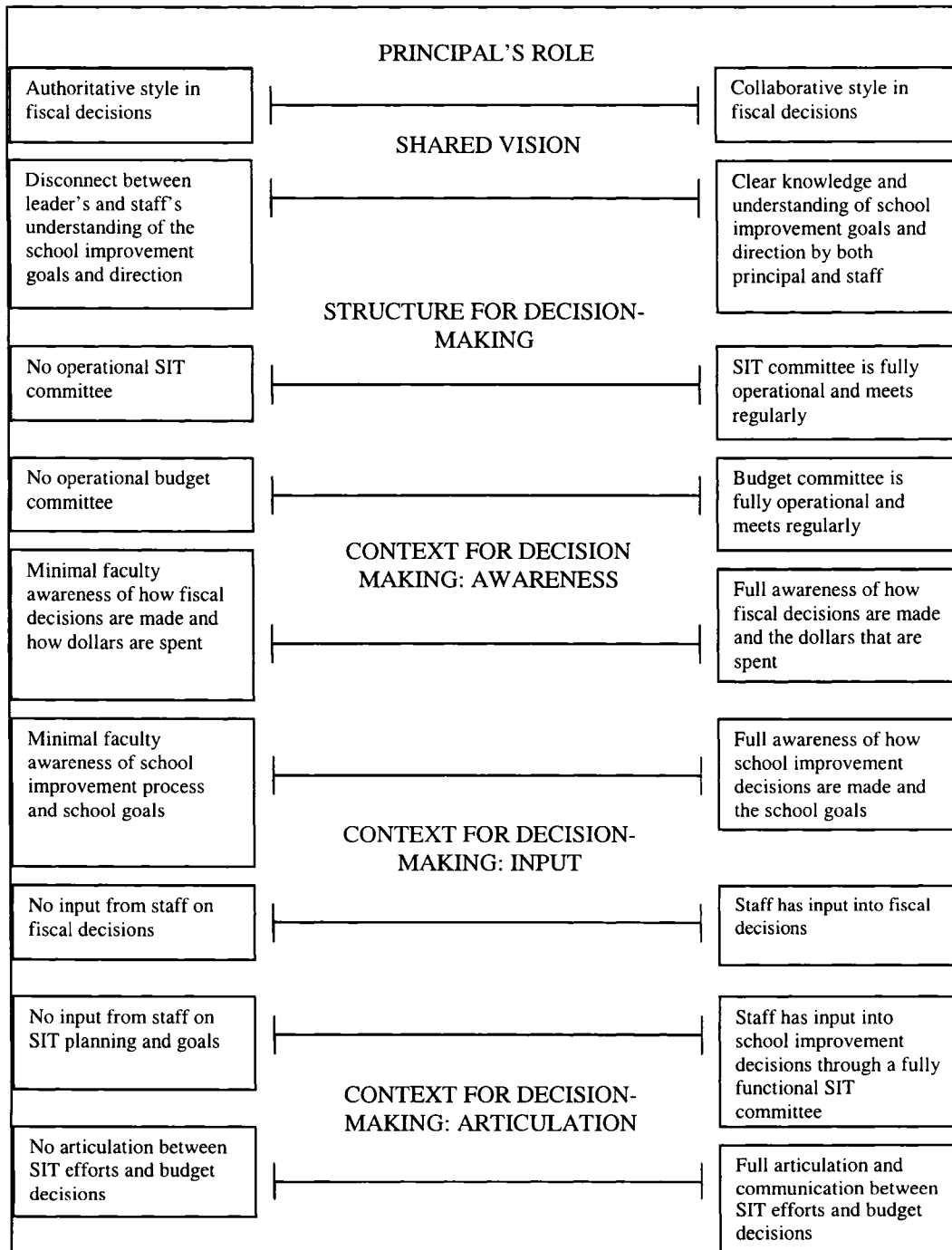
Theme 5 – Adequacy of Funds

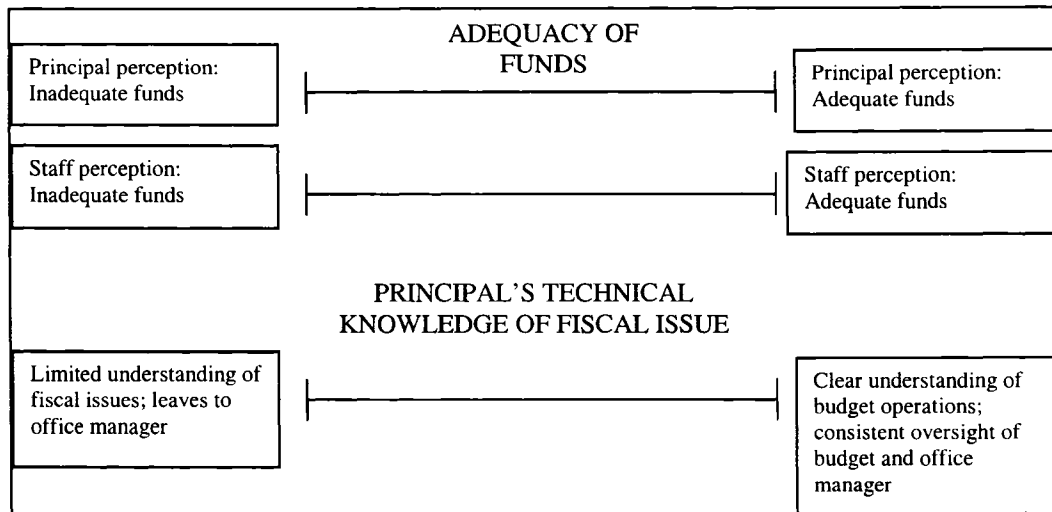
This theme attempted to gauge how the principals and staffs perceived the funding levels at their schools. Some of the school leaders and committee members believed that the funding level at their school was sufficient to meet the demands or the requests for resources and instructional supplies from teachers and staff. Other schools' personnel believed that the schools did not receive sufficient dollars to meet the needs of the school (See Figure 11 for the two one-dimensional typologies).

Theme 6 – Principal's Technical Knowledge of Fiscal Issues

This theme examined the knowledge base the principals had related to fiscal processes. The interview protocol and artifacts collected from elementary schools among the sample revealed a pattern of both a school principal's comprehensive knowledge and skill set necessary to oversee budgets. This theme also explored the degree of responsibility and authority given to the office managers over fiscal decisions (See Figure 11 for the one-dimensional typology).

Figure 11. One-dimensional typologies for the six constructed themes derived from the case studies.





Odden's School Resource Indicators

In addition to the constructed themes as a method of comparison and analysis among the case-study schools, data pertinent to Odden et al's (2002) School Resource Indicators were also collected. The sixteen School Resource Indicators were compared among the six schools using a matrix and discussion of the relevant indicators.

Summary

This chapter introduced the six constructed themes that emerged from the case-study analysis. The organization for reporting on each of the case studies was aligned with the six emergent themes. Additionally, the purpose and sample of the case studies were reviewed. An additional analysis of each school's resource allocations using Odden et al.'s (2002) School Resource Indicators was delineated.

CHAPTER 6

CASE STUDIES FOR SCHOOLS MEETING AYP

Flower Elementary School – Met AYP

Introduction

Flower Elementary School opened in 1994. This school was located in a fast-growing city attached to a larger metropolitan city in the southwest. According to U.S. Census Bureau estimates, the city had a population of nearly 159,000 residents in 2004. The school was in close proximity to newer homes and apartments. Many of the participants of the study revealed that eleven years earlier, the school did not have any buildings or homes near it. Growth in the city led to the construction of apartments and single family homes in the area.

The school classrooms were located inside the building and did not resemble the outdoor school models prevalent in many of the older schools within the school district. The principal expected that student work and visuals be displayed along the hallways. The facility was well maintained to a very high standard. Additionally, the school had experienced only a 2% teacher turnover rate during the last several years.

During the 2005-06 school year, Flower Elementary School had approximately 837 students. This enrollment figure had increased slightly since the selection criteria year, the 2003-04 school year, when Flower had 796 students. Percentages for the selection

criteria variables included 11% special education students, 38% of the students qualified for the free or reduced lunch program, and 20% of the students were categorized as limited English proficient. The demographics of the school during the 2004-05 school year consisted of 20% African-American, 6% Asian/Pacific Islander, 37% Hispanic, 1% Native American, and 36% white along with 39 classroom teachers, 8 specialists, 15 support staff, and 2 administrators; the assistant principal was on-site five days per week. Flower was on a year-round school schedule consisting of five tracks.

During the 2003-04 school year, Flower Elementary School was considered a school meeting AYP as set forth by the requirements of the No Child Left Behind Act. During subsequent school years, it has remained a school meeting AYP.

Principal's Role

Ms. Warren is the principal of Flower Elementary School, and she was serving her seventh year at the school. Previously, she had served in an affluent magnet school, an at-risk school, and a lower-middle class school. Additionally, Ms. Warren had also served as an administrator in another state for twenty-four years. She had been in the current school district for ten years and believed that it did not have a long instructional day as compared to her previous state's school district. She related that she was a conservative educator who did not want to see any time off task when visiting classrooms. Ms. Warren stated, "Teachers get paid to teach. I want to see teachers who are out of their seats working with kids." During the site visit, most of the school students were gathered in the multipurpose room to watch a play performed by intermediate grade-level students. The students were in rows marked off by dots, and the principal implied that she ran a "tight ship" when it came to managing and leading a

school. Ms. Warren described how the teachers were required to maintain “high-quality” bulletin boards:

All teachers are expected to display colorful and elaborate bulletin boards outside their rooms. This may not be improving student test scores, but it does have a positive influence on the school. Visitors see the bulletin boards and realize that the entire staff is taking a lot of time to work with the students.

While she claimed to promote structure within the school, Ms. Warren also declared, “I am not the type of leader to dictate time teaching subject.” She believed that quality teaching was one of the most important factors attributed to successful schools. The principal shared her view regarding teacher quality:

Teachers make a school successful or a failure. Schools may receive loads of money, but the key to raising scores on standardized tests is to make sure each classroom has a fantastic educator at the front of the room....We have good teachers who can teach with the basics [materials].

Micromanagement was not a part of her leadership style; however, she demanded that teachers and staff complete their assigned duties.

Shared Vision

In addition to the principal, a member of the School Improvement Team (SIT) was interviewed. Specifically, one of the participants, Ms. Angelo, served on the SIT during the 2004-05 and 2005-06 school years.

Ms. Angelo, a teacher, indicated that the SIT met formally once a month, and she also reported that many informal meetings occurred when necessary. When describing the

decision-making authority the staff had at Flower Elementary School, Ms. Angelo illustrated a spectrum of decision making:

I feel we are on a spectrum between absolute administrative decision making versus schools where I have taught that have cadres and staff making many of the decisions.

I think we [Flower Elementary] are leaning toward that.

This statement supported the premise that school improvement decisions were beginning to be made more often by teachers.

When asked about the current goals on the school improvement plan for Flower Elementary School, Ms. Angelo described literacy as the major goal. Additionally, she indicated that a 5% increase in math scores was part of the new school improvement plan. An examination of the 2005-06 school improvement plan revealed that reading and writing improvement were the two goals for Flower. Math was not part of the aforementioned plan; however, the 2004-05 school improvement plan did target mathematics test increases. According to the principal, the math goal was omitted from the most recent plan because the school met the math goal.

All school participants were aware of the school improvement goals to some degree; however, one participant believed that the math goal was still in existence for the 2005-06 school year. The year-round schedule did create some discontinuity in knowing the school improvement plan goals because specific teachers or committee members might be on a track break.

Structure for Decision Making

The assistant principal led the school improvement process and committee at Flower. The team consisted of teachers from each grade level and two administrators. The

principal described how she recruited and retained teachers to serve on the School Improvement Team (SIT):

As a result of the year-round schedule, we never have any down time. We form our committees with volunteers because volunteers are going to work. If we do not get what we need, I tap shoulders to imply that they would be good representatives for the committee....We also have incentives. If teachers are on the School Improvement Team, they do not have any form of duty [playground or lunch duty]. The other teachers understand because they know what the school improvement team does and the time commitment involved.

Additionally, members of the team were provided with notebooks containing delegated responsibilities for each member. "It informs us as to where we are and where we are going. We review it as needed," declared Ms. Warren, in reference to the notebooks.

Ms. Warren discussed how the school improvement team met with greater frequency at the start of the year when the plan was being developed. The principal believed that test scores were the focus of the school and served as the primary data source for developing the school improvement goals at Flower Elementary School. The meetings resumed with greater frequency once the test data arrived.

Flower Elementary did not establish a budget or resource management committee to make decisions regarding school funds or grant funding allocated to the school. As confirmed by the principal, the only committee involved with examining any type of budget was a district required School-Generated Funds (SGF) committee. The SGF monies included fundraiser proceeds, student store profits, teacher contributions for breakfasts/parties, activity monies, and community donations. The SGF committee was

viewed by the participating teachers as being synonymous with a budget committee.

District policy and regulations provided guidelines for the creation and responsibilities of the SGF.

Context for Decision Making

The principal of Flower Elementary School discussed how teachers were encouraged to participate in fiscal decisions at the school:

We do not run out of money. I think it is interesting that some teachers say, 'I wish I had this.' And I say, 'Well, did you ask for it?' A teacher must write out a request and provide a description along with the costs. I do not think we deny any legitimate requests.

In the aforementioned statement, Ms. Warren was referring to how teachers interfaced with the SGF committee. Written requests were not, however, solicited for funds from the instructional budget. Ms. Warren did remark that it was the grade-level chairs who were actively involved in the purchasing decisions associated with textbooks and instructional supplies.

The principal believed it was important for the SIT to establish goals not connected with money: "We want them [School Improvement Team members] to set the plan, and then the money part comes afterwards. I have never had a problem with funds." As a result of this belief, she viewed the SIT decisions and the budget committee/SGF decisions as not connected with each other.

The principal acknowledged that the SIT and budget committee/SGF did not work together and did not formally meet at any time. She also implied that expenditures related to instruction (e.g., textbooks) were handled as "they came along." For example,

during the time of this study, mathematics textbooks were purchased for the school from the instructional budget; yet math, as a SIT goal, had been dropped from the school improvement plan. In other words, as grade-level chairs made requests they were addressed.

Ms. Angelo confirmed that the school budget committee/SGF never met formally with the SIT. She thought that the SIT and budget committee/SGF might have worked through “channels consisting of the principal, assistant principal, and office manager.” Ms. Angelo stated, “I think that is kind of how they work together.”

Ms. Terrance, a first grade teacher, discussed how the principal basically collected “wish lists” from the teachers at the start of the school year. She felt that teachers could ask the administration for money and receive what they needed for their classrooms. As an overlapping member of the SGF and the SIT, Ms. Terrance stated:

I never really considered the committees influencing each other, but ...as the budget committee [SGF], we try to correlate what we do with the monies in response to what the School Improvement Team has considered important or what the school improvement goals are.

A review of the grant applications submitted by Flower Elementary School revealed that the requested funds targeted informational reading materials for students, funds for the tuition-based full-day kindergarten, and instructional staffing units. Grant dollars appeared to be targeted to the school’s SIT goals.

Adequacy of Funds

Ms. Terrance had just started her tenure on the SGF committee. She had been teaching in the school district for twenty-four years. She described how she had worked in several schools during the span of her career and had seen resource levels at varying degrees:

I have seen some schools with adequate resources, and I have seen some schools that have really inadequate resources. In the past, I have noticed that schools have adequate resources because of PTA and because they seem to be able to get things easier because the parents contribute.

The belief that the funding was adequate at Flower Elementary School was shared among most of the staff. This adequacy of funds was based on the premise that the teachers felt that their requests for instructional materials and resources for their individual classrooms were consistently met.

The principal, Ms. Warren, affirmed the inequity in funding between her school and other schools in more affluent areas of the city. She felt that this created a broad-based inequality across the entire district system:

I think it is really sad.... My parents are working parents who trust us with their kids and they do not scream. I know those people who do continue to make waves get more for their kids than we do.

Principal's Technical Knowledge of Fiscal Issues

The principal indicated that she “did not touch money” when referring to overseeing the school-generated funds. She did not imply that she didn’t know anything about budgeting procedures nor did she intimate that the office manager made independent fiscal decisions. However, she did not, in her interviews, portray that she had any in depth, comprehensive understanding of the budget operations at her school.

Odden's School Resource Indicators

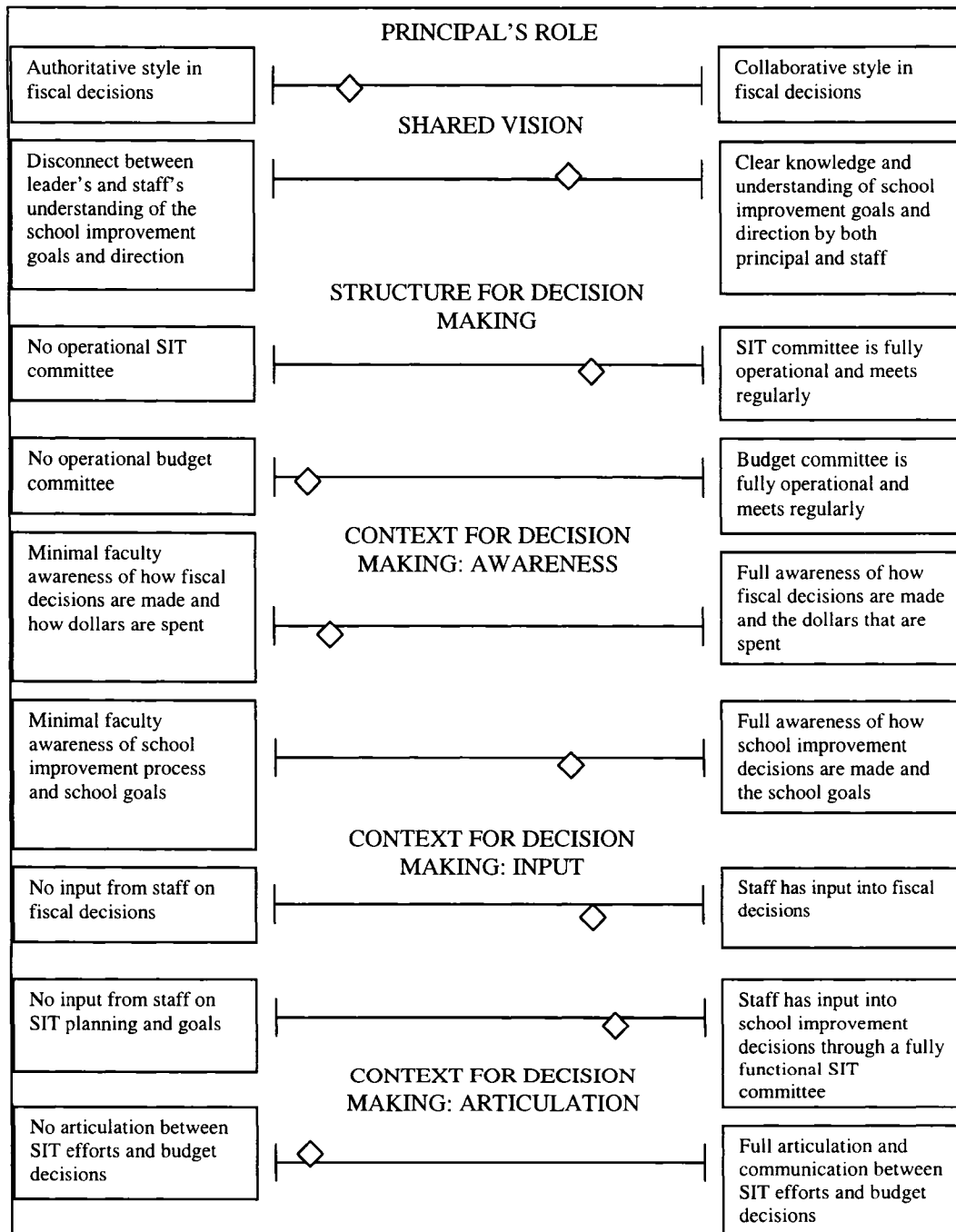
Flower had the highest percentage of core teachers (83%) compared to the other schools in the sample. A Title II grant assisted with extending the school day for some of the students. While not directly impacted, the school day was also lengthened by a state grant for \$175,000. The state funds targeted tutoring before school and after school for students struggling with reading and math. Additionally, the funding was used to lengthen the school day through subsidies for kindergarten students enrolled in the tuition-based full day kindergarten program. Finally, a classroom teacher was added at the intermediate grades to lower class sizes in the fourth and fifth grades. The funding for the teacher came from the area superintendent overseeing the school.

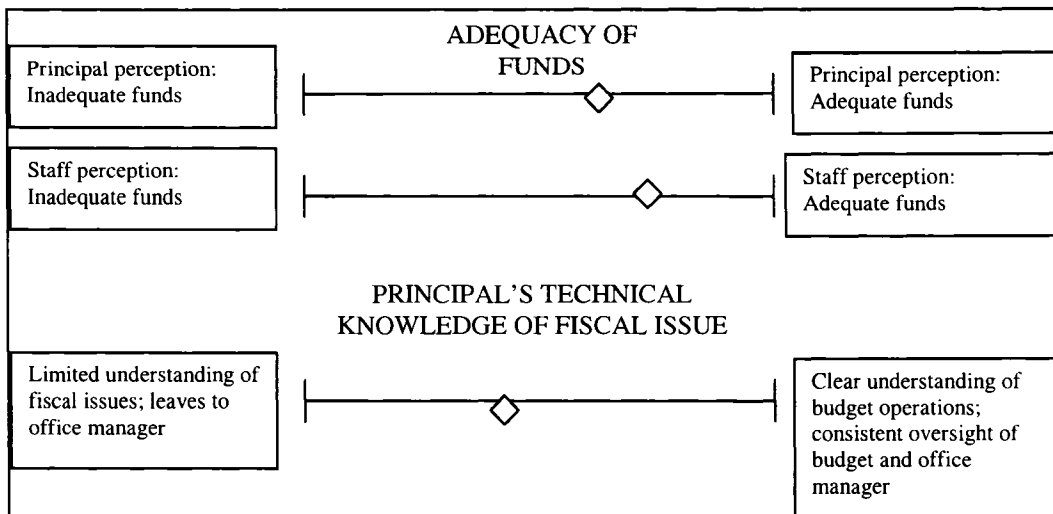
Summary

Figure 12 displays the one-dimensional typology for each theme in relationship to Flower Elementary School. This school appeared to have a clear structure and process for decision making. Both principals and teachers were focused on their SIT goals. However, there was no evidence that SIT goals, objectives, and action plans drove fiscal decisions at the school. Budgetary decisions, rather, appeared to be determined by teacher “wish lists” absent any rationales and the overall availability of funds. This did

not appear, however, to have a detrimental effect on the overall student performance of the school. Strong, focused leadership and adequate resources may explain this.

Figure 12. One-dimensional typology of themes for Flower Elementary School.





Fields Elementary School – Met AYP

Introduction

Fields Elementary School opened in 1955. Fields was located in a large, fast growing, metropolitan city in the Southwest that had a population of 534,847 in 2004. The surrounding neighborhood was comprised of older homes. The school was considered an outdoor school model meaning that the classroom doors exited directly to the outside. Several portable classrooms were located and used at the back of the school. Specifically, the principal's office was in a portable located on an asphalt area of the school property. The main office in the building had been condemned in the fall of that year due to asbestos and mold; and as a result, Fields Elementary School was scheduled to receive facility rehab and modernization exceeding ten million dollars.

Percentages for the selection criteria variables included 13% special education students, 52% of the students qualified for the free or reduced lunch program, and 33% of the students were categorized as limited English proficient. The demographics of the

school included 10% African-American, 55 Asian/Pacific Islander, 54% Hispanic, 1% Native American, and 30% white. During the 2005-06 school year, Fields Elementary School had approximately 685 students. This enrollment figure was consistent with the selection criteria year, the 2003-04 school year, when Fields enrolled 702 students. The school had 31 classroom teachers, 10 specialists, 15 support staff and 2 administrators; the assistant principal was on site five days a week. Fields was on a nine-month school schedule.

An interview with a veteran teacher of eleven years, Ms. Tanya, revealed a shift in the demographic characteristics of the school over the last decade. She shared the fact that eleven years earlier the student population was mostly white. Ms. Tanya explained how the Hispanic shift started approximately eight years earlier, and that the African-American student population had remained consistent over that same period of time.

During the 2003-04 school year, Fields Elementary School was categorized as a school meeting AYP according to the standards associated with the No Child Left Behind Act. Since that school year, Fields Elementary School has continued to meet standards and remained as a school meeting AYP.

In the context of the shifting demographics and the school meeting AYP, several teachers described the newly appointed assistant principal, Mr. Sanchez, as a critical component of their school. They felt that Hispanic parents were comfortable going to a Spanish-speaking administrator to discuss school issues and concerns. These staff members believed that Mr. Sanchez had increased parent involvement substantially even within the first month. Faculty interviewed saw this increased parent involvement

facilitated by the new assistant principal and a highly visible principal on campus as both positive aspects of their school climate.

Principal's Role

Mrs. Garner was the principal at Fields Elementary School. During the first field visit, she was observed interviewing a teacher for a special education position. Her demeanor was aggressive as she attempted to gain a sincere, personal perspective from the candidate regarding her own definition for at-risk youth. Several teachers confirmed that Mrs. Garner was very assertive with the staff, and as a result, some teachers had left the school in recent years. During an interview with Mrs. Garner, she shared her belief that when she first arrived at the school, the teachers believed they ran the school. For instance, several of the teachers had told her, "We will train you like we trained the others." Mrs. Garner respectfully took issue with this perspective. She stated, "I do not get trained."

Mrs. Garner was in her third year as principal at Fields. She had previously served as an assistant principal and described her current assignment as serving an at-risk school. She had been in the school district for twenty years, and served as an administrator for five years. Even though teacher turnover had increased in recent years (roughly 20%), several of the teachers indicated that Mrs. Garner was promoting and creating rapid, but effective, change at the school. Furthermore, the teachers shared their feelings that teacher turnover for the upcoming year was expected to be low. One teacher stated that Mrs. Garner told the staff on one occasion early in her tenure at Fields, "If you do not like it, you can transfer." The teacher, Ms. Tanya, also related that the principal of the school

held people accountable and that the culture of the school “promoted high stress levels” because of the accountability and focus on student achievement. Tanya implied:

The culture of the school promotes high stress among all staff. The stress is good stress because we are implementing ideas and goals to a high degree of completeness....We all work very hard and put our best effort forward.

Shared Vision

Mrs. Garner described her role in the school improvement process as a person who “shares information, research, and best practices.” She indicated that she strives to be a strong instructional leader among the staff members at Fields. She also outlined how the school improvement goals originated and the importance of research behind the instructional practices occurring at the school:

The goals originated out of the test scores, as well as, from an adherence to reading, writing, and arithmetic.... We share information on high-yield instructional strategies with other schools around us.... It is not something that happened overnight, but making people aware that by implementing instructional strategies, and explaining to staff the research behind the strategies, you are going to get more bang for your buck.

Structure for Decision Making

Mrs. Garner discussed the governance structure set in place at the school to promote school improvement planning and implementation. She described how grade-level chairs served on the School Improvement Team and how these staff members were responsible for sharing school improvement implementation phases with other staff members from their grade levels. Mrs. Garner briefly described the phase of school improvement planning and implementation the school was practicing at the time:

When we did the school improvement plan, we started working on it prior to this school year. Now we are looking at it and revamping the plan to keep the same goals; however, it depends on the test scores coming in. We rely on the inclusion of basic fundamentals: it is going to be geared toward math and literacy.

A budget committee did not exist to examine instructional resources and grant monies. Instead, the school did have the required School-Generated Funds committee, as regulated by school district policy, to allocate these funds. Mrs. Garner regularly consulted with the School-Generated Funds committee so that the committee of five members stayed informed:

They get the word out that it is not just me spending the money freely. The staff knows that we do not have a lot of money, and they have not seen frivolous spending. They have not seen it, but they do not fully know where it is going.

In an attempt to gather information related to the School-Generated Funds committee, an interview was conducted with the office manager of Fields Elementary School who assumed responsibility for running the meetings and maintaining the minutes from the monthly meetings. According to the office manager, five teachers and two support staff members served on the School-Generated Funds committee at Fields.

Context for Decision Making

In addition to the interview with the principal at Fields Elementary School, two members of the School Improvement Team (SIT) were interviewed. Ms. Tanya served on the SIT during the 2004-05 and 2005-06 school years. She was very much aware of the programs and instructional methods in use on the school campus and was readily able to delineate the goals from the school improvement plan during the interviews.

Ms. Tanya believed that the current school improvement planning and implementation process was working. She emphasized:

We get together and hash out ideas. We talk about what worked. One person does not dictate it. It is about ideas. For instance, the principal voiced how ‘these things came up for next year, I need your ideas.’ We are all involved in the process. I think everyone feels they can add something to it if they need to.... I think it is making our children move forward. I know it is working for the children in my classroom.

She also confirmed the configuration of the SIT and how the team was comprised of grade-level chairs. Although, some of the participants at the school were not aware of the specifics of the school improvement goals, they all had a sense that the goals concentrated on reading, writing, and mathematics.

Ms. Tanya was unaware of a time when the SIT met with the school budget committee/SGF; however, she shared the following information related to the two committees working together: “I do not think they [budget committee/SGF] have to have a lot to do with it because most of our school improvement plan relies on teachers and not on funds.” She also believed that the SIT members produced the school improvement plan and then delegated responsibilities/tasks to all personnel at the school. Ms. Tanya related how both the committee members and individual teachers were responsible. Once the plan was completed and responsibilities/tasks were assigned, she indicated that the committee only met every other month.

When discussing the connection between school improvement and fiscal decisions at Fields Elementary School, the principal described how the administration was responsible for informing staff that certain items could not be purchased: “I am the one

who says no. I am the messenger. I have to give the staff the message that we do not have the money.” She implied that the SIT provided some input into her fiscal decisions. Mrs. Garner related how she collected “wish lists” from all teachers at the beginning of the school year and how the office manager attempted to fulfill the requests through “bargain shopping.” The School-Generated Funds committee and School Improvement Team never formally met; however, the principal was responsible for reminding the School-Generated Funds committee of the school improvement focal areas. This was validated by the office manager: “Usually, the principal attends the meeting and informs the committee of the school improvement goals.”

Ms. Gweni, a teacher, also served on the SIT. She taught first grade and had been at the school for four years. In total, Ms. Gweni had been teaching in the school district for seven years. Ms. Gweni was able to describe the goals that were part of the school’s annual improvement plan. She also avowed, “We want to make AYP.” While the basic reading, writing, and math goals were part of the committee’s vision, Ms. Gweni also believed the overarching AYP goal was vital for school morale.

She continued to recount how all staff development days concentrated on the written school improvement plan. Ms. Gweni declared:

We meet frequently while developing it. In fact, we met before school started. Now, we meet once a month or so. Each staff development day we bring our plans and look over them to identify the parts in which we are currently working so that the staff is aware. I think they are very aware of what is going on.

Ms. Gweni perceived the principal, assistant principal, and office manager as the key fiscal decision-makers at the school site; however, she believed that the aforementioned

people distributed the money based on teacher requests. Ms. Gweni was very supportive of the principal; nevertheless, she thought that central office administration overseeing the school hindered flexibility with fiscal decisions.

Mrs. Garner discussed her role in the fiscal decisions made at her school. She perceived that the staff believed that she made all of the decisions regarding budget. She relayed how the district allocation or instructional budget was consumed by the purchase of textbooks for the year under study because the recent expectation for classroom textbooks was a priority of her area superintendent. This seems to support Ms. Gweni's perception that central administration can have a limiting effect on school site flexibility with regard to fiscal decisions.

Adequacy of Funds

Mrs. Garner claimed, "We have no extra funds." However, she emphasized that she believed that the most important factor for student success was teacher effectiveness, not money. She was not focused on purchasing "programs" to increase student achievement. In other words, the key to student performance did not depend on expending money for programs but was determined by the instructional effectiveness of the teaching staff.

When asked if schools received enough money for the operations of the school, Ms. Olivia, the office manager, affirmed:

I am kind of two-sided with that. I believe that with the money we receive we can obtain some of the supplies. We are just barely making it; but at the same time, it is like the real world. There is never going to be enough to run a school. You just work with what you have.

Fields did not receive any major additional funding from grant applications. The parent-teacher association of the school did raise \$17,000 for the school to use for updating technology; specifically, for newer computers to replace obsolete ones.

Principal's Technical Knowledge of Fiscal Issues

The principal of the school stated that the office manager made many of the fiscal decisions for the school. Teachers and administrators perceived Ms. Olivia, the office manager, as a key fiscal decision-maker in the school. As evidenced by a spreadsheet provided by Ms. Olivia, Fields Elementary School received approximately \$77,615 dollars in instructional funding support from the school district. At the time of this study, most of those funds had been encumbered and spent on math textbooks. As stated previously by the principal, this was done because it was a priority of the area superintendent.

Overall, the office manager was extremely proficient and perceived to make most of the fiscal decisions for the school; however, the principal was proficient and knowledgeable regarding the budget and the technical items associated with overseeing the fiscal decisions. Ms. Olivia appeared to be conscientious; yet, the principal was involved in all final expenditure decisions.

Odden's School Resource Indicators

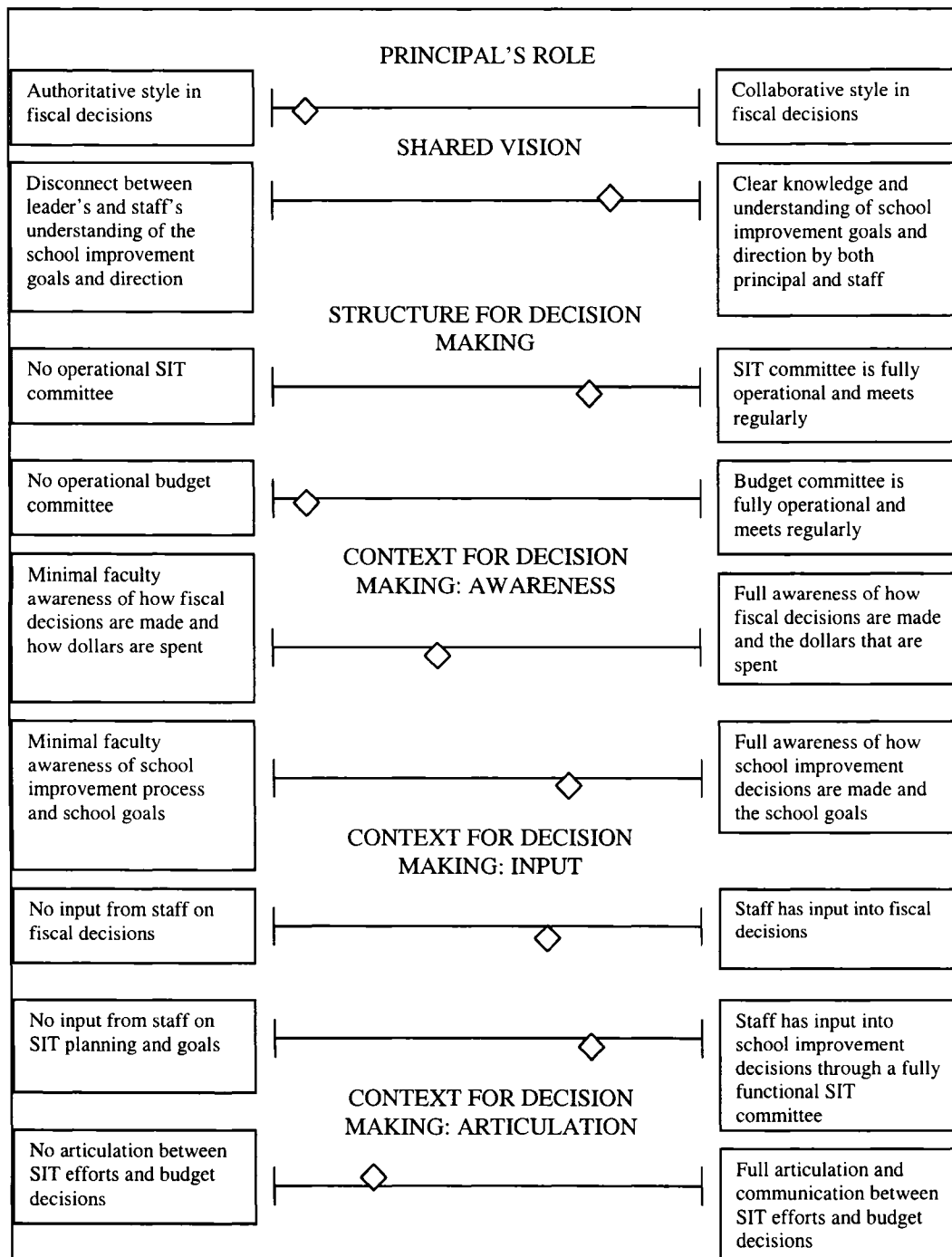
The most prevalent item noted in the case study of Fields pertinent to Odden et al.'s (2002) sixteen School Resource Indicators was the length of the reading class component. All students at the school were homogeneously grouped for an extra period of the day for remedial reading instruction. The length of reading class was increased without any additional expense.

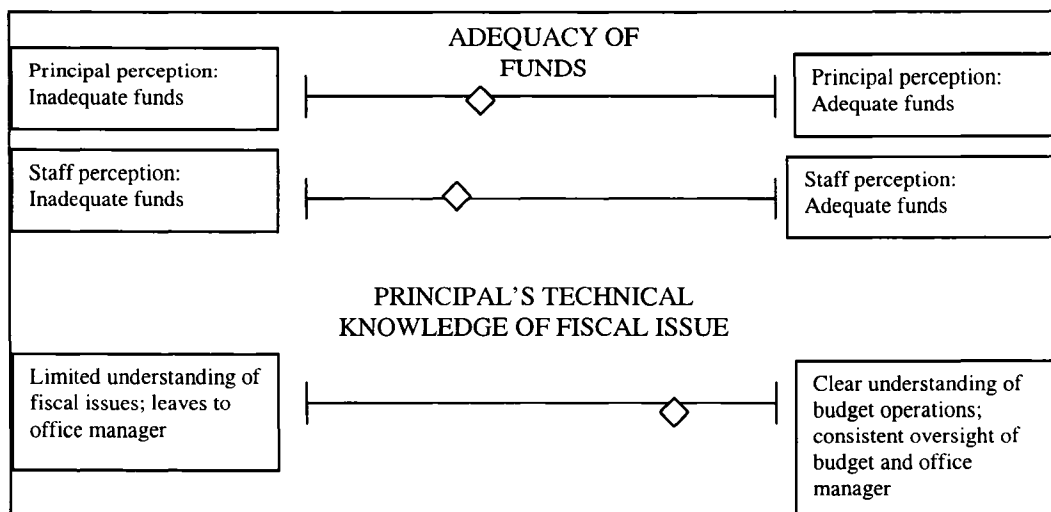
Funds from a state grant targeted professional development for the intermediate teachers. Specifically, the teachers were provided with writing instruction training. Fields received the least amount of external funding when compared to the other schools in the study.

Summary

Figure 13 displays the one-dimensional typology for each theme in relationship to Fields Elementary School. This school appeared to have a clear structure and process for decision making. Both principals and teachers were focused on their SIT goals. However, there was no evidence that SIT goals, objectives, and action plans drove fiscal decisions at the school. Budgetary decisions were ultimately executed by the principal; however, the staff believed that the office manager was making independent fiscal decisions. These factors, however, did not have a detrimental effect on the overall student performance of the school. Strong, focused leadership was observed. However, the principal and staff did not believe adequate resources were present at the school.

Figure 13. One-dimensional typology of themes for Fields Elementary School.





Summary of AYP Schools

A comparison between Flower and Fields Elementary Schools revealed several similarities and differences regarding their approach to school improvement planning and implementation and fiscal decision making.

Both schools received little additional funding resources outside of the regular instructional allocation. Other schools in these case studies, for example, received sizable state reading grants. Neither of the AYP schools received this large amount of funding (\$150,000 – \$300,000) targeting the primary grades. Additionally, both schools dispersed similar funding from their school-generated funds accounts during a one-year time span. Both leaders at the schools were perceived as running efficient schools. Both school principals believed that teachers needed to teach and be held accountable at all levels. Both sites did not have a budget or finance committee to oversee the instructional budget. Generally, however, the expenditures across the two schools were comparable.

The school improvement planning and implementation processes at each school were also very equivalent. Flower and Fields Elementary Schools mandated that the school

improvement team members draft the delegated responsibilities for members and all staff. Additionally, the school improvement processes were very open, and both leaders embraced input from the total staff.

The perspectives from each school were different in regard to the amount of money each school received. Flower Elementary staff believed that they “got by” and that all teachers obtained what they needed in the area of instructional resources. In contrast, the staff at Fields felt that they did not have enough money. The funding level was very consistent between the two schools; however, Flower Elementary School staff believed that students and staff were not unduly deprived of resources. On the other hand, Fields Elementary leadership felt that they had to decline funding requests quite frequently in order to keep the school budget in balance.

In summary, the school improvement processes were similar at both sites. A striking difference existed between the perspectives of both groups of participants regarding the adequacy of funding levels at the schools. On the one hand, while Flower thought more funding was always helpful, they were sensitive to the perception that “there was never enough.” Fields, on the other hand, perceived their funding was not adequate to supply the teachers with all of the necessary teaching resources. Since both schools were meeting their outcomes/goals this may have been the difference between a school seeing the glass half full or half empty.

CHAPTER 7

CASE STUDIES FOR SCHOOLS ON THE WATCH LIST

Palm Elementary School – Watch List

Introduction

Palm Elementary School opened in 1986. This school was located in a large, fast-growing city attached to a larger metropolitan city in the southwest. The city in which the school was located had a population of 224,829 in 2004. The surrounding neighborhood was comprised of a mixture of older and newer homes. Homes in the community could be described as small. While the homes were not dilapidated, they were considered lower-class homes as compared to other communities in the city. An apartment complex was directly across the street from Palm Elementary School. During various times, the researcher observed three or four mothers walking in front of the school with their children and babies. One Hispanic mother walked into the apartment complex with two toddlers and an infant in a stroller.

Percentages for the selection criteria variables included 12% special education students, 57% of the students qualified for the free or reduced lunch program, and 12% of the students were categorized as limited English proficient. The demographics of the school included 10% African-American, 2% Asian/Pacific Islander, 33% Hispanic, 1% Native American, and 53% white. During the 2005-06 school year, Palm Elementary

School had approximately 535 students. This enrollment figure was consistent with the selection criteria year, the 2003-04 school year, when Palm had 536 students. The school had 23 classroom teachers, 16 specialists, 17 support staff, and 2 administrators; the assistant principal was on-site only two days per week. Palm was on a nine-month school schedule.

During the 2003-04 school year, Palm Elementary School was deemed a school on the Watch List as defined by the requirements of the No Child Left Behind Act. Since that school year, Palm has been removed from the Watch List and has been considered a school that has made one year progress to reach AYP.

Principal's Role

Dr. Rhodes is the principal of Palm Elementary School, and she was serving her second year at the school. Previously, Dr. Rhodes had served in other at-risk schools in the district. She believed that this was “her most at-risk assignment” when compared to her other schools; altogether, she had been in the school district for twelve years as a teacher and administrator. She is bilingual and was observed several times communicating with parents and students in Spanish during field visits.

The principal indicated that she tried to “protect the teachers from fluff not related to instruction.” Dr. Rhodes felt that teachers became inundated with extraneous items not directly related to instruction. Her leadership philosophy involved hiring competent teachers so that “they can do what needs to be done.” Additionally, Dr. Rhodes believed that teachers must “use their time wisely.” In direct alignment to the aforementioned leadership philosophy, one morning, she was observed running copies for a teacher.

Dr. Rhodes described her role in the school improvement process as the “person who makes sure that it gets done.” Additionally, she felt that “she very often made decisions without consensus” when expending school-based funds.

Contrary to the principal’s perception, Mrs. Eppers, a teacher, believed Dr. Rhodes was “so open” and provided opportunities for the staff to collaborate. All of the interviewees perceived the principal’s leadership style as collaborative.

Shared Vision

All school participants were aware of the school improvement goals. The interviews revealed that all stakeholders, as well, were familiar with the three school improvement goals and the related action steps to achieve the goals. Dr. Rhodes emphasized that the goals for the 2004-05 school year originated “straight from the data.”

While the committee at Palm did not prepare written minutes of the School Improvement Team meetings, Dr. Rhodes, as well as the other committee members, verified that meetings occurred weekly in the fall. Additionally, three to four summer meetings were held to develop the goals to be presented to all teachers upon their return from summer vacation. The teachers on the SIT were paid for the time they convened over the summer when the data were examined and goals were proposed.

Dr. Rhodes believed that Palm had a cohesive staff who worked well together. She expressed the following opinion:

I think before I came here [Palm] each grade level and team were fairly decent and attempted to coordinate things, so I do not think that was a problem. The state grant has forced us at the K-3 level to look at specific data and make decisions...so it has forced the teachers to look at data.

Structure for Decision Making

Palm Elementary School had a SIT that consisted of four teachers and two administrators. The SIT met regularly.

Palm did not have a budget committee to examine the needs of the school as related to funding. Palm was required to have a working School-Generated Funds (SGF) committee as stated in the school district's regulation; however, the SGF committee was not required to make decisions regarding the monies allocated by the school district or received as a result of donors or grants. The SGF committee was viewed by the participating teachers as being synonymous with a budget committee; yet, Principal, Dr. Rhodes, realized that the SGF could do more with the regular allocation.

Context for Decision Making

Dr. Rhodes claimed to need assistance with learning the budget, and she had not made attempts to connect the work of the SIT with the budget committee/SGF. Under her leadership, the budget committee/SGF at Palm, while it primarily focused on the allocations of school-generated funds, had not been trying to expand further, in order to make more instructionally-related budget decisions. In relationship to the coordination between the SIT and budget committee/SGF, Dr. Rhodes stated these words:

They do not meet. I see it as my job to find out how we are going to fund this [school improvement plan]. Although we only look at it from an SGF committee, if we had a true budget committee, then we could do more...but I feel that teachers need to teach, and I will find them the money.

Admittedly, the principal acknowledged that the ultimate decision regarding expenditures was her own. However, Dr. Rhodes did imply that teachers had input with

regard to school purchases, even without a budget or finance committee, having input into the instructional monies and grant awards.

While the principal assumed most of the responsibility over the budget and spending decisions, the expenditures were aligned with the school improvement goals at Palm. The state reading grant directed a large portion of the resources, staffing, and funding to reading programs and remediation at the school site.

In support of the principal's perception of the school using data and the consistency of the SIT meetings, Mrs. Etters stated, "The committee initiates it-the language or the goals. Then we work together in the faculty meeting to define them and to redefine them for what is best for kids." When asked about the connection between the SIT and budget/SGF teams, Ms. Ramis, a teacher, perceived that the budget committee/SGF was very willing to assist with the SIT goals and support them with materials. "I have not seen any problem with them [budget committee/SGF] holding back materials or what we [SIT] asked for," responded Ms. Ramis. As a member of the SIT committee, she also believed that a representative from the SIT attended the budget committee/SGF meetings. While this was not necessarily the case according to Palm's principal, this committee member did perceive a working relationship between the SIT and budget committee/SGF.

Adequacy of Funds

At the time, Palm was the target of a state reading grant that assisted students in grades kindergarten through third. Dr. Rhodes perceived that the school was "getting what it needed" regarding funds and resources; however, she implied that the state reading grant monies were designated for specific classes, students, and teachers. Dr. Rhodes said, "I would like to hire the people I need." While she perceived the

elementary school budget to be very rigid, she had taken steps to accomplish her previous statement. She wrote and received several grants.

As a result of the state reading grant (\$150,000 annually), the participants at Palm perceived that the school was receiving an adequate level of funding. Additionally, the school received state remediation funds (\$50,000) to increase the amount of nonfiction texts in the library. A local industry donated funds (\$5,000) to assist the school with purchasing school supplies (e.g., printer cartridges, science supplies, and reading supplies). Finally, a state grant focused on innovative educational practices was written and received at Palm (\$285,000). The grant assisted the school with acquiring tutors, reading programming staffing, and class-size reduction in the fourth and fifth grades by adding teachers.

The staff perceived the funding level at the school as adequate. One teacher informed the researcher that between “the state grant, PTO, Dr. Rhode’s initiative, and the regular budgets...we get what we need.”

Principal’s Technical Knowledge of Fiscal Issues

The principal of Palm Elementary School admitted that the school budget and knowledge of the school budget were her weaknesses, and she hoped to learn more about the budget in the near future:

To be honest, my weakness is the budget. I am relatively clueless. The office manager we had before was clueless. The auditor dinged us because she was not turning in things. I could not tell you right now about the budget, but that is my goal. I budget at home, and I am able to make good decisions at home, but I feel I need to do that here. There is very little control over the budget.

Even though Dr. Rhodes claimed to exhibit weakness regarding the school's budget, she did express the idea that the budget was only made up of minimal discretionary funding. The researcher perceived that Dr. Rhodes used the lack of discretionary funding as a rationale for not learning about the budget or budgetary procedures.

Odden's School Resource Indicators

Palm had the lowest percentage of core teachers (59%). Class sizes for reading were smaller in the primary grades as a result of the state reading grant. Additionally, class sizes in the intermediate grades were lower as a result of the added teachers in the fourth and fifth grades. The length of the day was not longer in comparison to the other schools; however, daily tutoring occurred after school to assist students in reading. Palm also had the highest per-pupil expenditure in comparison to the other studied schools.

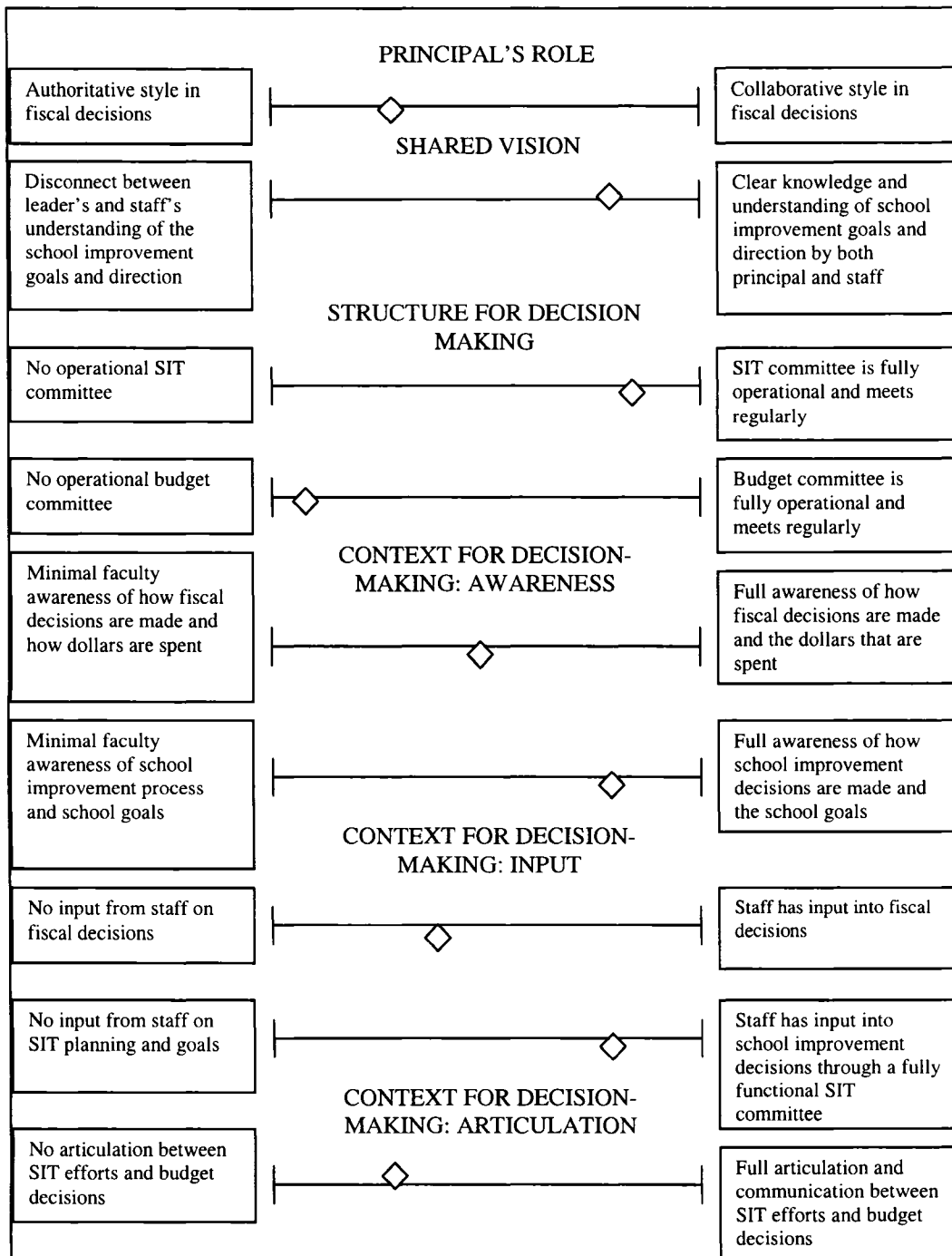
Summary

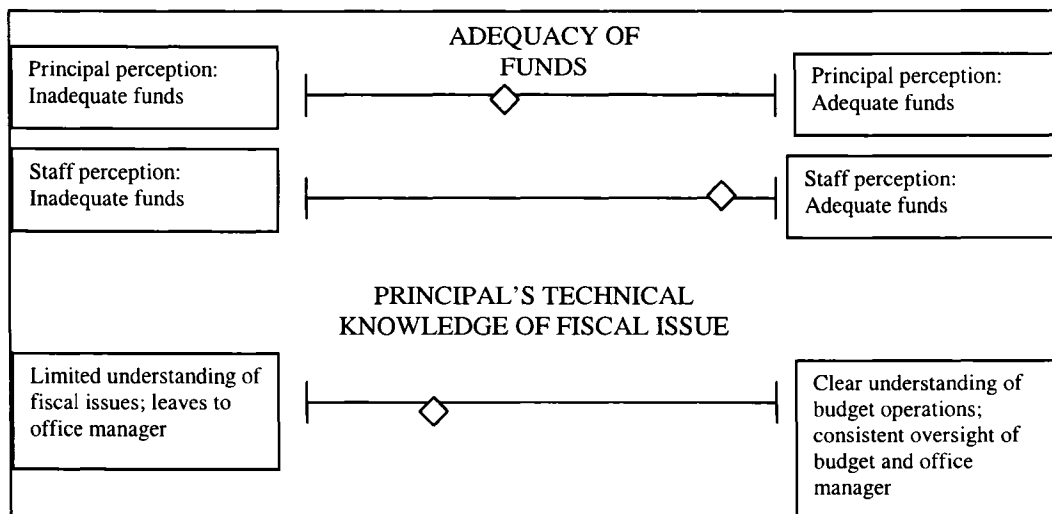
Figure 14 displays the one-dimensional typology for each theme in relationship to Palm Elementary School. This school appeared to have a clear structure and process for decision making. Both principals and teachers were focused on their SIT goals. However, there was no evidence that SIT goals, objectives, and action plans drove fiscal decisions at the school. Budgetary decisions appeared to be determined by the principal. The principal disclosed her lack of knowledge related to the school budget and its technical processes.

The most prevalent item noted in the case study of Palm pertinent to Odden et al.'s sixteen School Resource Indicators was in the review of the grant applications submitted by Palm Elementary School. It revealed that the requested funds targeted instructional materials and instructional staffing units to impact class size. Specifically, the principal

was able to acquire funds to gain one additional teaching position and two instructional staff positions with a grant award of \$285,000. The staff perceived the funding to be adequate; however, the principal implied that the overall funding was not adequate because of the limited discretion. The targeted use of funds focused on resource allocations that research says can impact student achievement may have been one of the contributing factors that moved Palm Elementary off of the Watch List to a school that was meeting Adequate Yearly Progress.

Figure 14. One-dimensional typology of themes for Palm Elementary School.





Evergreen Elementary School – Watch List

Introduction

Evergreen Elementary School opened in 1959. Evergreen is located in a large, fast growing, metropolitan city in the southwest. The city in which the school is located had a population of 534,847 in 2004. The surrounding neighborhood was comprised of older homes. Several of the homes had small, dilapidated lawns and multiple vehicles parked in the driveways. The school was considered an outdoor school model meaning that the classroom doors exited directly to the outside. Several portable classrooms were located and in use at the back of the school. A metal fence surrounded the entire perimeter of the school and included a large grass playing field area that was completely brown.

Percentages for the selection criteria variables included 9% special education students, 63% of the students qualified for the free or reduced lunch program, and 49% of the students were categorized as limited English proficient. The demographics of the school included 8% African-American, 8% Asian/Pacific Islander, 69% Hispanic, 1%

Native American, and 15% white. During the 2005-06 school year, Evergreen Elementary School had approximately 750 students. This enrollment figure was consistent with the selection criteria year, the 2003-04 school year, when Evergreen enrolled 760 students. The principal of the school indicated that the enrollment of the school was as high as 771 students during the 2005-06 school year. The school had 47 classroom teachers, 10 specialists, 18 support staff and 2 administrators; the assistant principal was on site five days a week. Evergreen was on a nine-month school schedule.

Mr. Andrews, the principal, explained the changing demographics of the school. He indicated that Evergreen used to be a top-performing school in the eighties and nineties. He described how some upper-echelon administrators had previously served at Evergreen in the late eighties and early nineties when the neighborhood was considered affluent. “We have over 600 Hispanic children and ... between 380 and 400 students are provided with ELL services,” remarked Mr. Andrews, when expanding on the changes the neighborhood had encountered.

During the 2003-04 school year, Evergreen Elementary School was deemed a school on the Watch List as defined by the requirements of the No Child Left Behind Act. Since that school year, Evergreen has moved from the Watch List to the In Need of Improvement category. Specifically, the school was in its first year of the latter status and did not meet the standards of academic growth according to the No Child Left Behind Act.

Principal's Role

Mr. Andrews was the principal at Evergreen Elementary School. He began his job eight months prior to this study. He had previously served at three elementary schools as an assistant principal and described his previous administrative assignments as at-risk; however, he had worked as an administrator in one school that had at-risk students combined with students of upper socioeconomic standing. He had been in the school district for fifteen years, and served as an administrator for five years. All of his teaching and administrative service had been at the elementary school level.

The principal indicated that he always “attempts to build an inclusive team” and implied that the upper-echelon district administration placed him at Evergreen for that reason. He stated, “I value the teachers in the trenches and value their input.” While Mr. Andrews exhibited sincerity in wanting to include members of the school staff in decision making, he did state, “Some teachers want inclusive work environments, but some of them will see me and turn the other way because they know I will ask them to do something.” Overall, the leadership style exhibited by Mr. Andrews involved the most collaboration when compared to the other principals included in the study. As the new principal, Mr. Andrews also consistently asserted that he promoted gradual change and acted as a listener during his first year.

Shared Vision

The participants at the school were not fully aware of the school improvement goals. There was a disconnect between the principal's and staff's knowledge of the school improvement process. Mr. Andrews described the school improvement process at Evergreen and stated the following:

As far as the SIT process, I have taken a leadership stance.... We received some initial information, as far as test scores and demographic data; and we made the initial steps in putting together the SIT plan.

The principal perceived that the school-improvement-planning process was ongoing in relationship to the data gathering process. Mr. Andrews described how a “process occurred” even before the actual school improvement plan was devised or written. According to Mr. Andrews, as a result of his school’s current status in the In Need of Improvement category, a community committee met to “dig down deep into the possible barriers of student achievement.” This was a requirement of the state and local district. Only after this process was completed, could the members of Evergreen’s School Improvement Team meet to complete their own plan.

However, according to some of the staff members, the data gathering and school improvement process were “not consistent.” As well as the lack of meetings of the SIT at Evergreen, Ms. Lucile, a teacher, was unfamiliar with the goals set forth in the school improvement plan. When asked about the specific school improvement goals identified in the annual school improvement plan, Ms. Lucile, a member of the school improvement team, listed programs implemented at the school. Ms. Lucile stated,

“We have pre-and post-tests.... Some of the classrooms were modeling a lot of thinking processes and higher order questioning....We also implemented a parent link to get parents involved in the school. That is the key to raise student achievement.”

The *shared vision* at Evergreen was not consistent between the leadership and teachers. The researcher perceived that the plan was not a living document being addressed by the teachers; rather, it seemed that the goals were “forgotten” by interviewed teachers.

Structure for Decision Making

As a veteran teacher with nearly twenty years of experience in other states, Ms. Lucile had been at Evergreen Elementary School for seven years. She taught fourth grade and also taught adult English classes from her classroom in the evening for parents in the community. Ms. Lucile was unfamiliar with the budget committee/SGF set up at Evergreen. A budget committee did not exist to examine instructional resources and grant monies. Instead, the school did have the required School-Generated Funds committee, as regulated by school district policy, to allocate these funds. The School-Generated Funds committee did not meet to discuss instructional spending.

She also explained the configuration of the SIT. “Well, there is one [teacher] from each grade level,” stated Ms. Lucile; however, she was not sure if a kindergarten representative served on the School Improvement Team at Evergreen. She was unfamiliar with the committee membership and supported the idea that the SIT at Evergreen rarely met after the plan was written. The SIT was not fully operational or consistent with regular meetings. For the most part, the committee was put together as a requirement to produce a written plan, and committee members were not fully aware of the steps and actions of the plan.

Ms. Lucile described how the school complied with all of the requirements of the state reading grant, a program targeting grades kindergarten through three, even though her grade level was not required to do so. She was very familiar with the state reading grant’s requirements and instructional focus on primary student literacy, but was skeptical and unsure of the structure or collaboration occurring between the SIT and budget committee/SGF. Ms. Lucile stated haltingly, “There is a budget committee and

School-Generated Funds committee.... I think it is called.... Again, there is a committee that is comprised of each grade level that decides how the money will be spent and what for.”

Context for Decision Making

When asked how often he made any budget decisions without consensus from the staff or committee, Mr. Andrews replied in these words:

Rarely. At this point, never. Between the office manager, assistant principal, and the ELL specialist, I always try to gather initial feedback before we make a final decision. I may even contact district personnel like I have done in the past.

Ms. Lucile believed that the current administration attempted to allow teachers to provide input regarding the school improvement plan and goals. She emphasized, “The principal’s contribution that I considered most valuable was his after-school session where teachers could sit in after the testing numbers were reported. He stayed late on certain nights so that all teachers could give their input.”

Ms. Cedric, a budget committee/SGF member, indicated that eight teachers and staff served on the SGF committee at Evergreen. When asked about the decisions of the budget committee/SGF being formed or influenced by the School Improvement Team’s goals, Ms. Cedric responded, “I do not know if they [decisions] are.” She continued to discuss how the School-Generated Funds committee’s focus was on expenditures for “assemblies, field trips” and other “minor” items.

The interviews revealed that the stakeholders were not familiar with the way fiscal decisions were made at Evergreen. Specifically, Ms. Lucile served on the SIT and was unaware that the school did not have a budget or finance committee. The principal and

office manager supported this belief. A member of the budget committee/SGF believed that the budget operations of the school did not connect with the school improvement process. Furthermore, Mr. Andrews acknowledged that a “narrow” circle of people made many of the decisions regarding expenditures.

Adequacy of Funds

Most expenditures at Evergreen were in line with the two goals established by the SIT. The state reading grant monies, which exceeded \$150,000 of funding, dictated what items and resources could be spent. While the resources purchased for the reading goal nearly tripled the amount of resources targeting the mathematics goal, the collected artifacts and interviews supported that a connection did exist between expenditures and school improvement.

Overall, the principal perceived that the funding level for the school was adequate. Mr. Andrews stated, “The staff does the best it can with what they consider to be limited resources.” He perceived the funding to be adequate and also thought the school personnel did not “throw money away.”

At the time, Evergreen was the target of a state reading grant that provided money, supplies, and resources to grades kindergarten through third. As a result, Mr. Andrews believed that the school expended the most money on reading improvement programs.

On the other hand, the teachers believed that the funding was not adequate. Ms. Cedric, a teacher, felt that schools “do not get a lot of money.” When discussing the instructional budget at Evergreen, she declared:

They break it down into subcategories like custodial supplies and there is never enough money in custodial supplies to pay for expenditures throughout the year so

that has to come out of the regular budget...there is not enough money, and I do not know how to fix that without giving more taxes.

Principal's Technical Knowledge of Fiscal Issues

The office manager at the school was new to the position; however, the researcher concluded that she was making many independent fiscal decisions. The new principal was “shaky” when describing his familiarity with the school budget and budgetary operations. However, even with the knowledge deficit concerning fiscal matters, Mr. Andrews did report that he asked for assistance from district personnel.

In explanation of the idea that only certain staff members were involved in the fiscal decisions at Evergreen, Mr. Andrews explained how the previous administration created the players in the fiscal and budgetary decisions. He remarked:

I assumed a role consisting of a narrow approach, because of the fact that for whatever reason, before I got here, they might have had the decision-making process as a learned process. It has been a smaller, narrow circle which includes, the assistant principal, office manager, myself, and people from the budget department [in the district office].

Odden's School Resource Indicators

Evergreen had lower class sizes in comparison to the other studied schools. The school had the second highest percentage of core teachers at the school (82%). This was a result of the state reading grant for the primary grades. During the previous year, Evergreen had received state remediation funding that exceeded \$50,000 for reading resources. Additionally, a state grant focused on innovative practices was received for the 2005-06 school year in the amount of \$106,000. The monies from the state grant

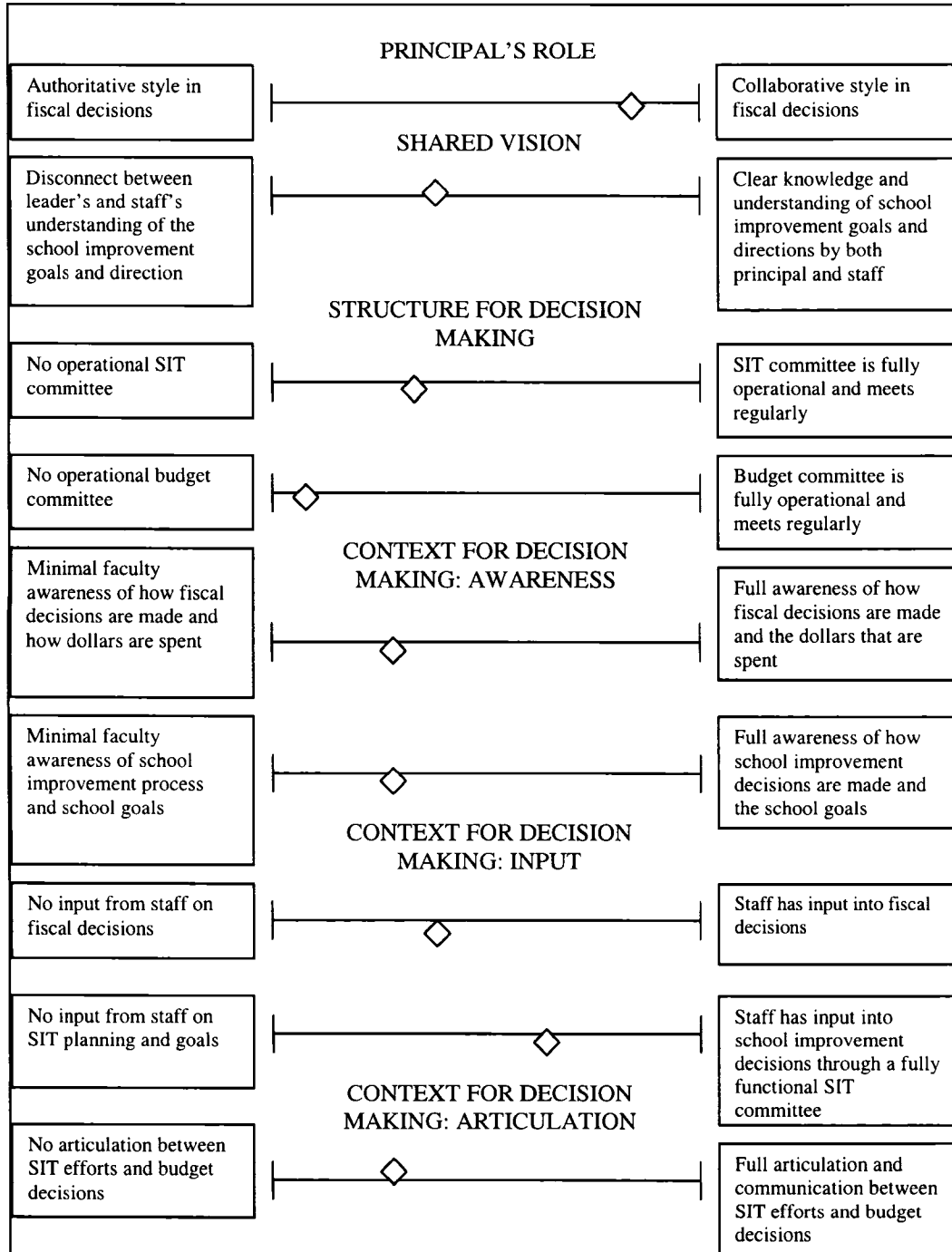
targeted packaged programs to be implemented at the school site and were focused on increasing English/language arts and mathematics achievement. An additional state grant was written requesting over \$500,000; however, the grant request was partially funded by the state for approximately \$203,000. The funds targeted after school tutoring and packaged literacy programs. In addition to these funds, the school also received \$5,000 from a local industry for mathematics textbooks.

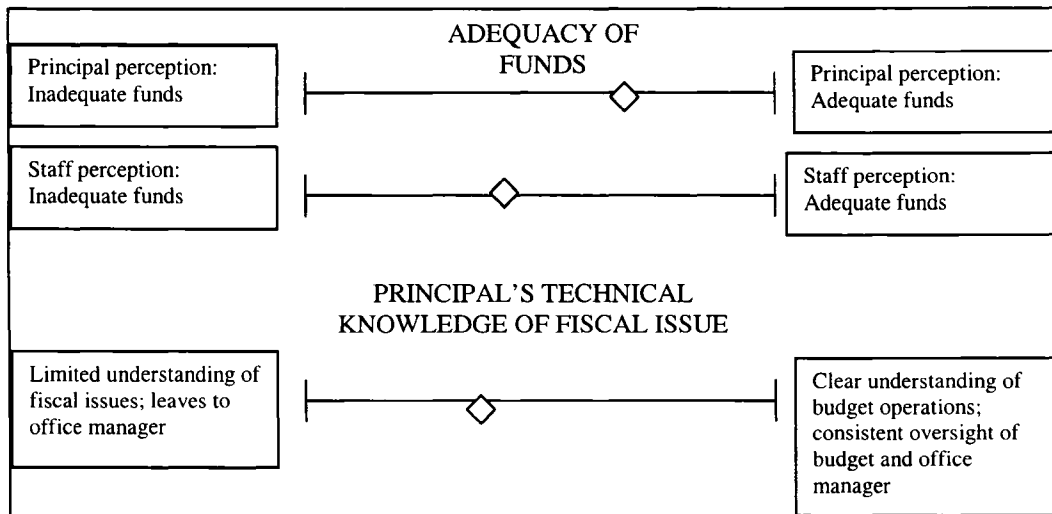
Summary

Figure 14 displays the one-dimensional typology for each theme in relationship to Evergreen Elementary School. This school did not have a clear structure and process for decision making. Only the principal was focused on their SIT goals. The teachers were unaware of the goals in the plan and categorized “programs” as the particular SIT goals. There was no evidence that SIT goals, objectives, and action plans drove fiscal decisions at the school. Budgetary decisions appeared to be determined by the principal, assistant principal, and office manager. The principal conceded his lack of knowledge related to the budget and its technical processes. However, he was never reluctant to call supervisors or budget department personnel for assistance. In comparison to the other principals, Evergreen’s principal promoted the most collaboration among staff members. However, collaborative activities did not seem to be strategically focused on a shared vision or goals. This could be a factor in this school’s moving from Watch List status to a school In Need of Improvement.

The most prevalent item noted in the case study of Evergreen pertinent to Odden et al.’s (2002) sixteen School Resource Indicators was the state reading grant that assisted in lowering reading class sizes and extending the length of reading periods.

Figure 15. One-dimensional typology of themes for Evergreen Elementary School.





Summary of Watch List Schools

A comparison between Palm and Evergreen Elementary Schools revealed several similarities and differences regarding their approaches to school improvement planning and implementation and fiscal decision making.

Variation existed between both schools in relationship to the awareness or knowledge of school improvement goals. The SIT member at Palm Elementary was fully aware of the goals and was comfortable conveying the data used to establish the goals. Conversely, the SIT member at Evergreen was not familiar with the specific school improvement goals. Additionally, participants at Evergreen were unfamiliar with the structure of the budgetary process at the school.

While the two schools varied in the aforementioned area, both principals saw themselves as the primary decision-makers regarding school-based expenditures. The principal at Palm did not perceive herself as knowledgeable regarding the school budget; however, she did make the final budget decisions. This was also the case at Evergreen. Evergreen's principal also exhibited limited understanding of budgetary processes.

Both sites had state reading grants that assisted with the acquisition of large amounts of funding (\$150,000 - \$300,000) and reading resources, as well as very structured programs that targeted the primary grades. Palm, however, appeared to target dollars more strategically at those research-based resource indicators delineated by Odden et al. while Evergreen targeted dollars to packaged programs.

The governance structures at both sites did not include budget or finance committees. School-Generated Funds committees oversaw the comparatively small budgets that existed in banking accounts, but not the allocations from the school district. It appeared that teachers at Palm, however, had greater input into fiscal decisions than those teachers at Evergreen where fiscal decisions were made by a “narrow circle” of people.

In summary, the participants at Palm had a clearer picture of the school improvement goals. Both schools did not use budget or finance committees to make fiscal decisions concerning the instructional allocations, but teachers at Palm had input. The schools did have School-Generated Funds committees that met to decide on expenditures related to student-generated revenue; however, the amount of money in these accounts, as compared to the instructional allocations, grants, and other instructional funding, was not substantial.

CHAPTER 8

CASE STUDIES FOR SCHOOLS IN NEED OF IMPROVEMENT

Ocean Elementary School – In Need of Improvement

Introduction

Ocean Elementary School opened in 1973. It was located in a large, fast-growing metropolitan city in the southwest which had a population that exceeded one-half million in 2004, according to U.S. Census Bureau estimates. Mrs. Collins, the school principal, related the fact that Ocean had the highest rate of homeless children in the city. She indicated that many of the neighborhood homes contained multiple families within each residency; therefore, the school district categorized these families as homeless. As the researcher entered the school, it was obvious that recent improvements had been completed. Specifically, the rock landscaping was accented with desert plants, and the front of the school had received a fresh coat of paint.

The school was overcrowded and did not have enough classrooms to house the instructional staff. On the dates this researcher made site visits, several classes were conducted in a space not considered to be a classroom. Specifically, some of the classes were conducted in an open-space area without walls. A portable white board was at the center of the area as the teacher instructed her classes. Ten portable classrooms were also located on the fields where students used to play.

Percentages for the selection criteria variables included 11% special education students, 72% of the students qualified for the free or reduced lunch program, and 43% of the students were categorized as limited English proficient. The demographics of the school included 14% African-American, 8% Asian/Pacific Islander, 35% Hispanic, 1% Native American, and 41% white. During the 2005-06 school year, Ocean Elementary School had approximately 865 students, 44 classroom teachers, 17 specialists, 20 support staff, and 2 administrators. The school was on a ninth-month schedule, and the assistant principal worked five days a week at the site. Ocean was different from the other selected case-study schools because it had a dual-language program occurring in the primary grades. As a result, the principal implied that the school district's English Language Acquisition Division supported the school monetarily, along with other instructional resources. Additionally, the principal indicated that parent involvement among the Hispanic parents was "high." As the case with the other schools in the study, Ocean did not receive any Title I funding.

Mrs. Collins, the principal, described the demographic shift that had occurred at Ocean in only a few years. She stated, "During my first two years at Ocean, the community was a white, working class neighborhood." She also revealed the change in demographics by sharing how the school's free and reduced lunch rate had risen 50% during her tenure as principal of the school.

During the 2003-04 school year, Ocean Elementary School was considered to be In Need of Improvement according to the standards associated with No Child Left Behind and the state's accountability plan. Since that school year, Ocean has been removed from In Need of Improvement status and is now a school on the Watch List.

Principal's Role

Mrs. Collins had been the principal at Ocean Elementary School for five years. Within that school system, five years was considered a lengthy amount of time to be a principal at one site. Prior to her appointment at Ocean, Mrs. Collins had served as an assistant principal at several elementary schools in the same city. Her assignments as assistant principal ranged from affluent to at-risk schools. Additionally, she was in her thirtieth year of service for the school system.

Even with the rise in students who qualified for free or reduced lunch and an increase in ethnic diversity, Mrs. Collins reported that the teacher turnover rate was very low (7%). She revealed that many teachers left the school to work at schools closer to their homes, but she emphasized that teachers did not leave because they were discontent or philosophically disagreed with the instructional leadership. As for the instructional leadership, Mrs. Collins believed all site-level decisions made on the campus directly impacted the students in a positive way. According to the principal, she promoted collaboration among all staff members. She stated, "I involve as many people as possible to get input."

The principal described how the school increased their scores on an internal language assessment tool for English language learners. Mrs. Collins declared, "We were one of the very few schools to make progress for the second-language kids and that is attributed to persevering in our goal of helping those kids develop their language skills." The interviewed teachers corroborated the increase in language scores and attributed the gains to the collaborative nature of Mrs. Collins. Mr. Williams, a teacher, stated, "We have a voice. We are able to speak, and we are given an opportunity to express our ideas....I

feel comfortable approaching our principal with ideas and requests. The decisions are made together.”

Shared Vision

Mrs. Collins described the school improvement process at Ocean and placed the emphasis on the students not speaking English fluently. Additionally, she recounted how the teachers were empowered to analyze the testing data while she served as a facilitator.

Mrs. Collins explained:

They [teachers] are looking at what kinds of things we need for our students and for them to be successful. So I would say ultimately, it is a facilitator role I play, but I am the one with the final decision-making authority and responsibility.

In relation to the school improvement process concentrating on the ELL population, Mrs. Collins represented:

Looking at the district, we are not alone in that deficit so it made me feel better about the situation; however, the “catch-22” in math-problem solving and math- content area is that it is actually a reading problem because so many of our students are second-language students.

In relation to the aforementioned quote and the belief that the ELL population and dual language program assisted with the development of the goals, Ms. Kosk, SIT member, also implied that another campus program led to the origination of the school improvement goals. Ms. Kosk stated these words:

We also have a program [state reading grant] that was implemented in the last few years and we have dual language. These are two major programs that we have to take

a look at when we are focusing on our goals. These programs enrich what we have set out to do with goals.

When asked about the goals of the last two school improvement plans and in reference to the reading and math school improvement goals, Ms. Kosk, a teacher, replied:

The goals originated through AYP.... What we looked at were scores from state tests and classroom assessments.... Since we have a high second-language population, we also have to look at enriching vocabulary so that we can improve second-language skills and scores.

All participants at the school were aware of the school improvement goals. The interviews revealed that all stakeholders were familiar with the two school improvement goals and the related action steps to achieve the goals. Additionally, all participants were cognizant of the second-language population and the inherent focus on this group of students.

Structure for Decision Making

Mrs. Collins explained how the writing of the school improvement plan is done by a group of people. Specifically, she described how a teacher from each grade level, specialists, and administrators work together to develop a plan. The SIT committee was fully operational at Ocean.

The school also had a Learning Improvement Team (LIT) to examine instructional decisions. A portion of the committee's responsibilities focused on school budget issues; however, the entire agenda at LIT meetings was not dedicated to expenditures or fiscal matters. Mr. Williams was a second year teacher at Ocean Elementary School. He taught fifth grade and served as a member on the Learning Improvement Team. "I am

the voice of the fifth grade,” asserted Mr. Williams when asked about the role of the LIT. The LIT meets every week, and Mr. Williams stated, “Ten minutes of each meeting are used to update us on budget information.”

The other committee involved with examining any type of budget was a district required School-Generated Funds (SGF) committee.

Context for Decision Making

The governance structure at Ocean did allow for a connection between the school improvement process and fiscal decision making. The school had the LIT designed to have a membership comprised of grade-level representatives and specialist representatives. Mrs. Collins described how the Learning Improvement Team was involved with the School Improvement Planning Team:

And then we also involved our LIT and talked about when we started making decisions for budgetary expenditures and took them back to the different grade levels. We asked them, “What do you need? What do you need to do your job?” Ultimately, that way, everyone had an opportunity to participate in putting together the plan and then deciding on the expenditures to support the plan.

With eight years of experience in education, Ms. Kosk had been at Ocean for seven of those years. In addition to her position assisting English-language learner students, she also was a classroom teacher.

Ms. Kosk expressed how she is “one of the people that take a look at the money we spend and in what areas.” She saw herself as an advocate for the second-language students. She explained how the membership of the SIT was comprised of teachers, administrators, and parents.

Ms. Kosk believed that the School Improvement Team and school-budget committee, known as the Learning Improvement Team at Ocean, worked collaboratively. She explained how both committees have overlapping membership.

Mr. Williams, a teacher, also thought the SIT and LIT worked collaboratively. He revealed how the process aspired to ensure collaboration between the two committees as the LIT members took the budget information back to their grade-level members. According to Mr. Williams, the grade levels then discussed the information and proposed ideas to the administration. Based on that information and feedback, the expenditure/budgetary decision “got executed.”

The fiscal decisions appeared to be made by the entire school community only after the Learning Improvement Team members disseminated the ideas related to budget. As far as the Learning Improvement Team and School Improvement Team formally meeting during the year, Ms. Kosk indicated that the teams did not meet together but the membership on the committees overlapped.

Adequacy of Funds

At the time of the research, Ocean was the target of a state reading grant that provided money, supplies, and resources to grades kindergarten through third. Mrs. Collins also reported how the school had purchased and utilized grade-level (e.g., fourth and fifth grade) resources with the state reading grant; these grade levels did not directly receive monies for the resources. She believed that the state reading grant materials and strategies created academic success. She attributed the recent rise in criterion-referenced test scores to the programs. When asked to provide the items/resources receiving the

most money at Ocean Elementary School, Mrs. Collins indicated that the most resources were allocated for reading improvement programs and reading textbooks.

Ocean did have a School-Generated Funds committee that oversaw the monies associated with fundraising, student stores, and other revenue gained by the school. The principal revealed that the student store was closed because she felt the support staff member running the store could be better used elsewhere. Mrs. Collins believed that the student-store component of the school did not collect enough revenue to remain open. The principal also shared that the district's English Acquisition Department gave Ocean "a lot of money." Mrs. Collins perceived that the funding level at Ocean was adequate.

Mr. Williams also supported the perception of the school's principal in regard to the adequacy of the funding provided to the school. Mr. Williams placed reading improvement programs at the top of the list for utilizing the most expenditures at Ocean Elementary School. Additionally, he shared how an extra teacher was provided to the school from central administration to support remediation and smaller class settings in the intermediate grade levels. He believed that the funding level was adequate; however, he felt the facility was not large enough to provide an optimal education for the students.

Principal's Technical Knowledge of Fiscal Issues

The principal at Ocean Elementary School admitted to having an efficient and knowledgeable office manager; however, the interviews and school visits revealed that the principal had a clear understanding of the budget operations as well. She was fully aware of the duties of the office manager and consistently monitored the office manager's decisions.

The principal recounted how she served on the state's grant-review committee and was aware of the rubric used to decide funding amounts. After a career of thirty-two years, Mrs. Collins appeared to be one of the most knowledgeable principals in budgetary procedures.

Odden's School Resource Indicators

Class sizes for reading were smaller in the primary grades as a result of the state reading grant. Additionally, class sizes in the intermediate grades were lower as a result of the added teachers in the fourth and fifth grades. The length of the day was not longer in comparison to the other schools; however, daily tutoring occurred after school to assist students in reading. Ocean showed a per-pupil expenditure of \$5782 from the In\$ite database. This figure, however, did not include the external funding sources that exceeded \$800,000. In relation to the other schools, Ocean acquired the most external funding for the year under study.

As with other case-study schools, Ocean Elementary School was granted funding from the state legislature for programs and projects aimed to increase student achievement by implementing innovative ideas. The state grant monies received by the school totaled \$306,000 in one year. As indicated by the principal, Ocean Elementary School was one of the very few schools in the district to be fully funded for that particular grant request. The funds were used for additional staffing, tutoring, instructional resources, and smaller classes.

Additionally, the principal revealed that the state reading grant also provided a large amount of funding for reading improvement programs in the primary grades. When asked to estimate the amount of funding received at a school with the state reading

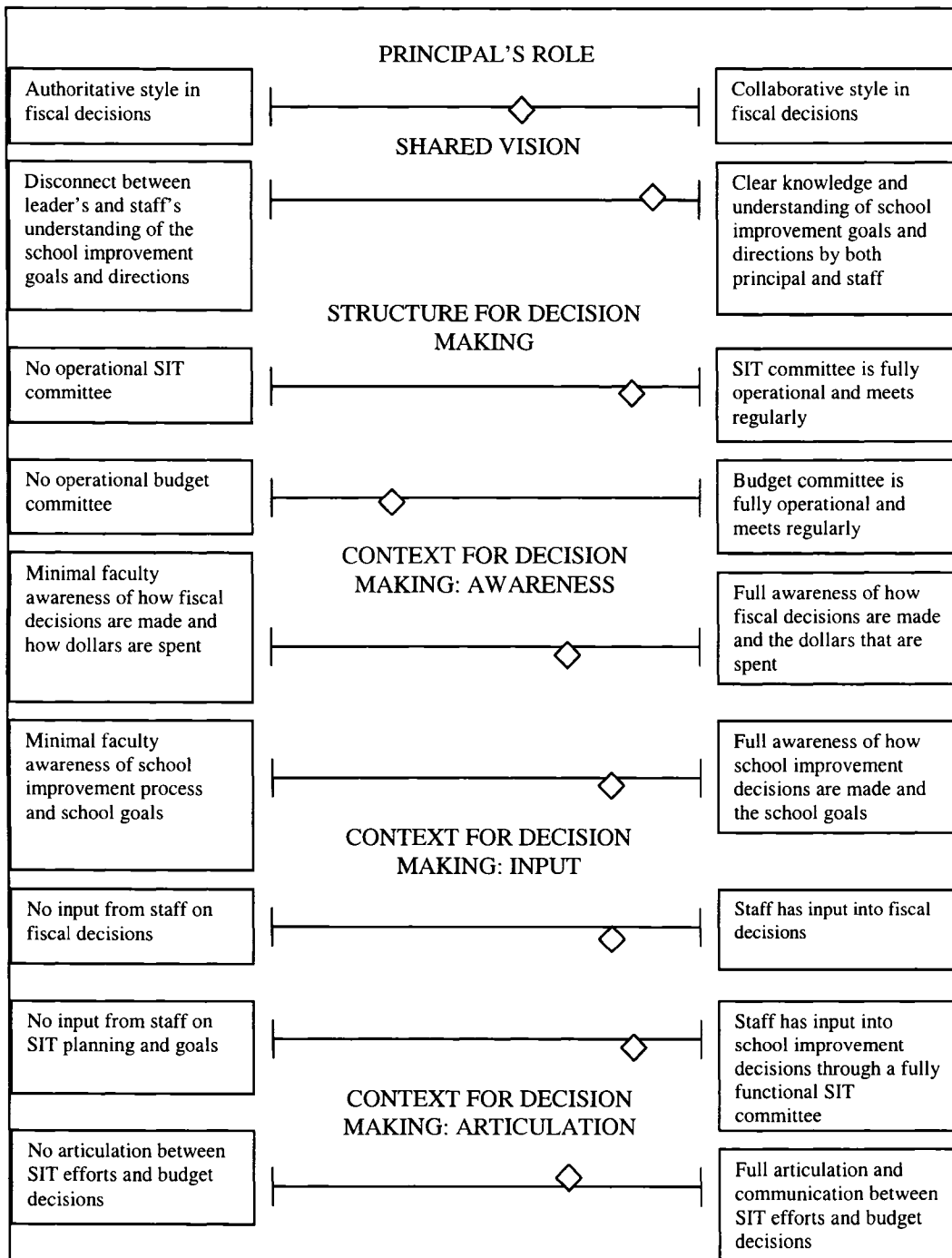
program, the principal stated, “We probably received \$500,000.” Finally, the namesake of the school’s family also donated \$20,000 to the library. Books and computers were purchased for the library.

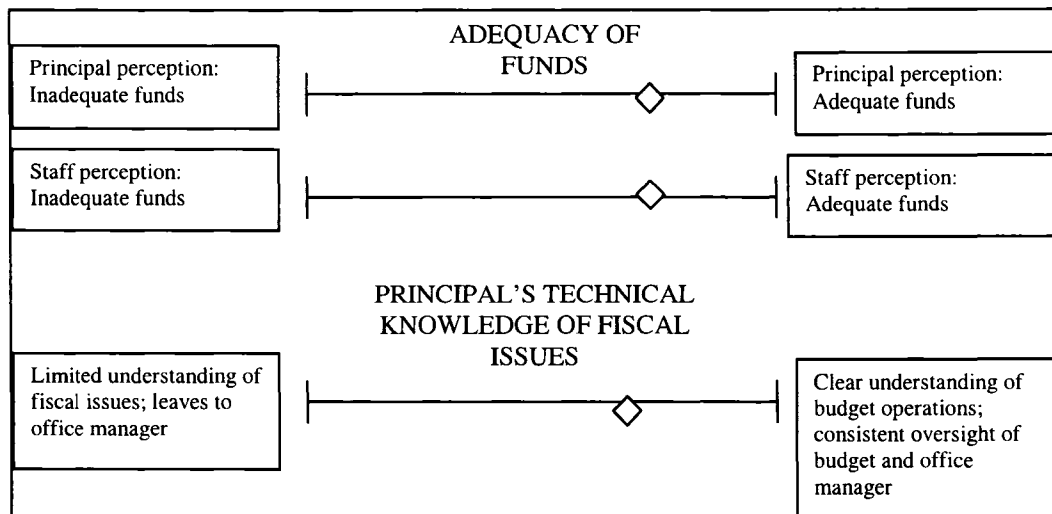
Summary

Figure 16 displays the one-dimensional typology for each theme in relationship to Ocean Elementary School. This school appeared to have a clear structure and process for decision making. Both principals and teachers were focused on their SIT goals. There was evidence that SIT goals, objectives, and action plans drove fiscal decisions at the school through the LIT committee. Since the 2003-04 school year, Ocean has been removed from the In Need of Improvement categorization. Collaborative, focused leadership and adequate resources may explain this.

The most prevalent item noted in the case study of Ocean pertinent to Odden et al.’s (2002) School Resource Indicators was related to the review of the grant applications submitted by Ocean Elementary School. Ocean received the most financial support from external funding sources when compared to the other case- study schools. These resources were targeted for reducing class sizes, tutoring, and instructional materials for delineated SIP and literacy grant goals.

Figure 16. One-dimensional typology scale of themes for Ocean Elementary School.





Bay Elementary School – In Need of Improvement

Introduction

Bay Elementary School opened in 1966. Bay is located in a large, fast growing metropolitan city in the southwest. The city had a population of 534,847 people in 2004. Bay Elementary School was facing its third construction-modernization project in eight years. The facility was comprised of the original building dating to 1966, a newer wing built in the nineties to house a computer lab and other classrooms, and several portable classrooms. Limited space had affected the school in a negative way. Instead of utilizing an assembly area for performances and school gatherings, portable closets and bookshelves were now set up in the area as offices and small classrooms.

The surrounding neighborhood contained older homes dating back to the 1960's. Several of the larger homes had five to ten cars in the front, indicating that multiple families lived in the homes. Several apartment complexes were also within a one-mile

radius from the school. Parents seemed to be quite involved in school activities. For instance, parent volunteers maintained a science room with fish, mammals, and reptiles on a daily basis.

The principal related how parent involvement was a critical component of the school and how this involvement had increased since she first started her job. She shared how each school year began with a community barbecue in the evening and remarked:

During the first few years, we would have only two hundred parents and children show up. Last year, we had nearly thirteen hundred people at our barbecue. If you fed them, they came out for these events as extended families.

Percentages for the selection criteria variables included 11% special education students, 62% of the students qualified for the free or reduced lunch program, and 30% of the students were categorized as limited English proficient. The demographics of the school included 13% African-American, 6% Asian/Pacific Islander, 50% Hispanic, 1% Native American, and 31% white. During the 2005-06 school year, Bay Elementary School had approximately 707 students, 27 classroom teachers, 16 specialists, 18 support staff, 2 administrators, and the assistant principal was on-site five days a week. Bay was on a nine-month school schedule.

During the 2003-04 school year, Bay Elementary School was deemed a school In Need of Improvement as defined by the requirements of the No Child Left Behind Act. Since that school year, Bay has remained on the In Need of Improvement list.

Principal's Role

Dr. Evans was the principal at Bay Elementary School. She had been in the school district for eighteen years, and served as the principal of Bay for eight years. At the time of the study, Dr. Evans shared how she was content with her employment at Bay; however, she was under the impression that upper-echelon administration was thinking of moving her to a new school in the near future.

The principal promoted collaboration to an extent. Dr. Evans discussed the spirit of committee work on the campus. She stated, "It is all based on consensus....We are able to collectively determine what we have control over and we get the committee beyond what we could not do or offer. We have to base decisions on what can be done at the school." Her leadership style was not completely authoritative in nature; however, some fiscal decisions intended to be arrived at through a committee were decided by her independently. As a result, her style of leadership fell in the midrange on a continuum between authoritative and collaborative.

Shared Vision

The participants of the study were aware of the school improvement goals and processes at the school. However, Ms. Janis, a teacher, perceived that the administration was not holding people accountable for adhering to the goals of the school improvement plan. She thought that all teachers were aware of the school improvement goals, but were complacent about truly increasing student achievement. Ms. Janis stated, "I would like to see teachers made more accountable or more follow-through being taken. I do not feel there is enough here. Just because it is said that teachers need to complete certain tasks, one can't assume it is being done."

When asked about her role in the school improvement process, Dr. Evans stated, What was great about that is that it was not just the administration sitting down and saying, 'Here are the test scores and let's write the plan.' It was a team of people on a committee who were conducting the research setting goals

The principal implied that the school improvement goals and processes were shared among all participants. However, Ms. Janis contradicted the principal's perception. It appeared that the goals and school improvement process were not shared as a result of the lack of accountability.

As a veteran teacher with twenty-eight years of experience in the school district, Ms. Janis indicated that the SIT rarely met to discuss school improvement goals. She supported what the principal had said regarding the lack of formal meetings, the school improvement process, and the teachers:

The follow-through has been almost nil. The ideas are good. It is just that when the door is closed, the ideas are not implemented. It's assumed that these things are being done, and overall, I would say that they are not. There is no follow-through to determine whether or not they are occurring.

The participants at the school were aware of the school improvement goals; however, there was a disconnect between the administration and staff's understanding of the school improvement process.

Structure for Decision Making

The principal of Bay Elementary School was forthright about the school's weakness. She believed many worthwhile goals were introduced with school improvement plans; however, the follow-through on the part of the teacher was "not happening." A School

Improvement Team was in place, yet, clearly delineated responsibilities were not enforced by the administration. Additionally, according to Ms. Janis, a teacher, the SIT team “rarely” met to discuss school improvement planning and implementation.

The school did not have a budget committee; however, the Cabinet was the school governance structure tasked with site decisions related to curriculum and finance. The Cabinet also assumed the responsibility for examining school-generated funds. The Cabinet was made up of teachers from each grade level, specialty area teachers, support staff, and administration. Cabinet members were appointed by the principal to a one-year term.

Context for Decision Making

Even though Dr. Evans implied that collaboration had occurred in the school improvement planning and implementation processes, she also revealed how weakness in the collaboration efforts of teachers was present:

The school improvement process illustrated a glaring shortcoming rising to the surface. We have some teachers who see themselves as collaborative, but they go to their classrooms and close their doors and do what they want to do. This came out during the process and was a good thing.... They [teachers] were open and said, ‘You know I say that I do cooperate, but this is really what is happening.’ This may be one of the weaknesses that we have. I perceive this as a target area that we need to work on and our teachers admit to it.... Pretty much all of our grades collaborate well and plan together, but we have one grade level that does not do that.

Dr. Evans did perceive that the teachers of the school were actively involved in the fiscal decisions of the school. The governance structure she promoted consisted of a

group of teachers called the Cabinet. The Cabinet met each week to discuss programs and fiscal items related to the instructional budget. Dr. Evans described how only fiscal decisions regarding core-curriculum items were made without consensus from the Cabinet:

I don't think we ever made any [fiscal decisions] outside of the core areas and stepped out and said, 'Just buy that.' We did that with a special education teacher who did not spend his money.... I don't see us doing that. We do it every now and then.

According to the administration, some teachers were not acting collaboratively. In contradiction to the administration, Ms. Janis, a member of the SIT and Cabinet, perceived that the administration made "nearly all" of the fiscal decisions at the school. She described the process of how the Cabinet approved instructional purchases. Ms. Janis declared:

They [the decisions] are mostly made after the purchases have been made. There are things that are brought up at the Cabinet concerning purchases. Every purchase goes through the Cabinet, but they [administration] have usually already purchased it.

When asked if the SIT and budget committee [Cabinet] work collaboratively to ensure that fiscal decisions were connected to the goals for school improvement, Ms. Janis replied, "No." Additionally, according to Ms. Janis, the SIT team "rarely" met to discuss school improvement planning and implementation.

Conversely, another teacher at the school, Mrs. Mitchell, described the function of the Cabinet and implied that fiscal expenditures are reviewed at the weekly meetings. Additionally, she indicated that many programs are presented at the Cabinet meetings:

As Cabinet members, we communicate with our grade levels and look at the programs we think will help to meet AYP. We take it back to Cabinet and discuss it and decide which programs we want to purchase and how it will benefit the school.

Mrs. Mitchell also noted how the Cabinet members were responsible for “discussing with the other teachers what we have purchased so that teachers become aware of the materials needing utilization.”

The input level from staff for school improvement decisions was high at Bay. However, the input level into fiscal decisions perceived as “high” by the administration was a “façade.” The Cabinet reflected limited collaborative fiscal decision making. Rather, the Cabinet was used to “validate” fiscal decisions that had already been made by administration.

Adequacy of Funds

Both teachers and the principal perceived that the school did not receive adequate funding. The principal discussed the grant monies the school had received to target parent and community events. One such activity was observed during a site visit by the researcher. Parents and students were invited to attend a movie night at the school.

Even though grants were awarded to the school, the principal perceived that the school did not receive adequate funding. The principal indicated how she must use a portion of the SGF account each year to offset the negative balance in the instructional budget she always encounters at the end of the year. She stated, “I provide a check to the district at the end of the year from the SGF account.”

Mrs. Mitchell perceived that Bay Elementary School concentrated a large portion of the budget on technology. She also believed that the school did not receive enough funding to provide for adequate professional development for teachers.

Principal's Technical Knowledge of Fiscal Issues

The principal at Bay Elementary School had a basic understanding of the budgetary process at the school site. The office manager was not making independent fiscal decisions. The principal claimed to use the Cabinet to make spending decisions. Additionally, the assistant principal worked closely with the principal to oversee the budgetary process at the school.

Dr. Evans made fiscal decisions independently and was familiar with the technical aspects of the budget. With an assertive and knowledgeable assistant principal, the administrative team oversaw the budget and fiscal decisions.

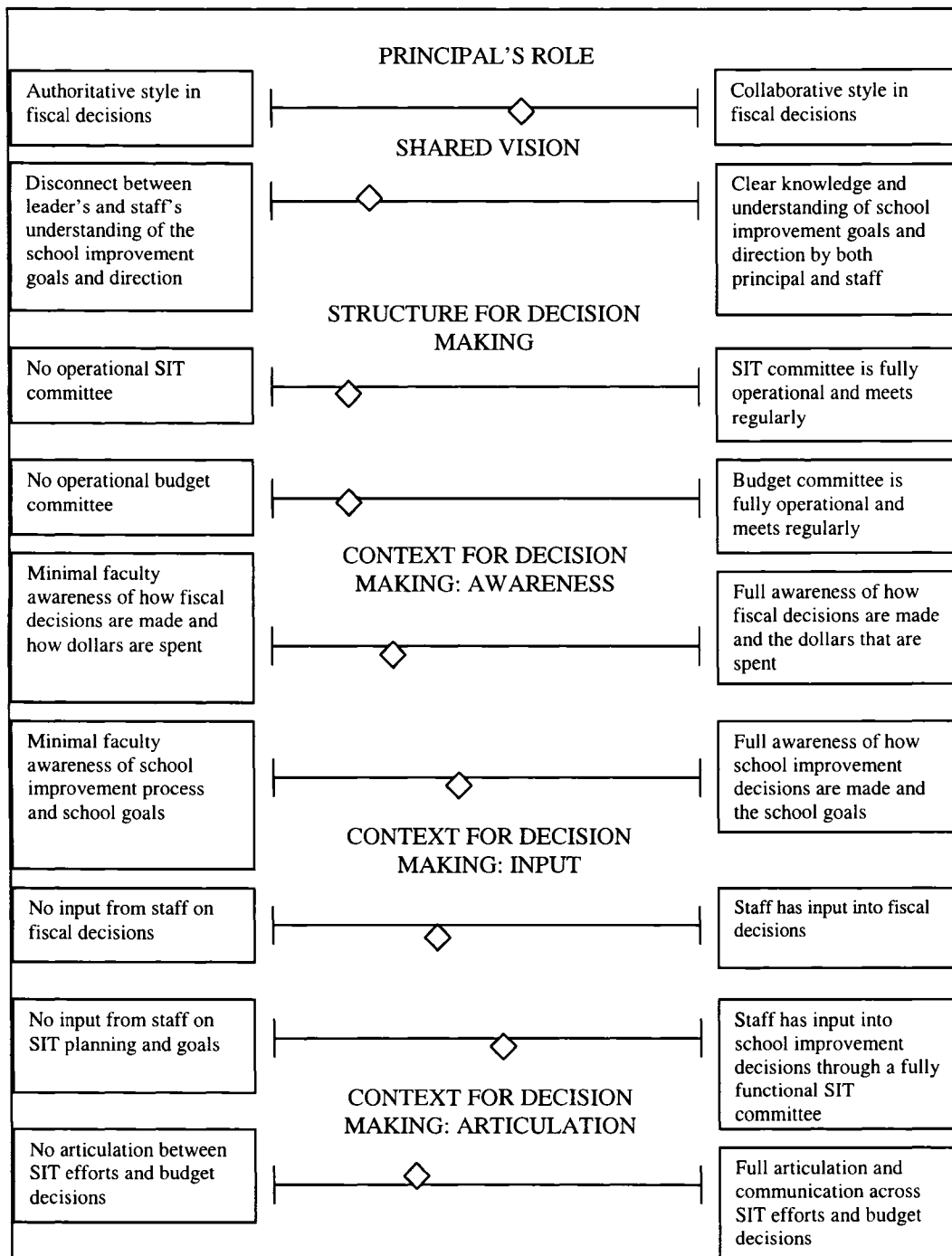
Odden's School Resource Indicators

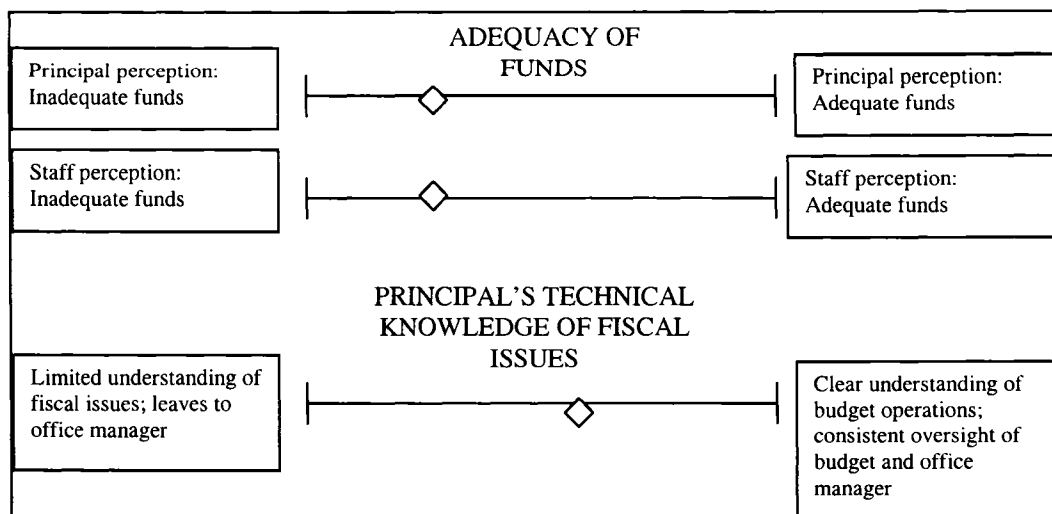
Bay had 63% of the teachers instructing in core areas as identified by Odden et al. (2002). The assistant principal at Bay wrote and received a grant of \$120,000 to increase parent and community support. The school further received \$111,000 from a state grant for literacy personnel and resources for the school's primary-grade levels. This funding did lower class sizes for the primary grades in reading, and it supported the cost of a technology-based reading program, as well. In addition to these funds, Bay requested and was awaiting approval for a \$300,000 grant for technology hardware and software for literacy instruction.

Summary

Figure 17 displays the one-dimensional typology for each theme in relationship to Bay Elementary School. This school had a conflicted structure and process for decision making. Both principals and teachers were focused on their SIT goals. However, according to the principal and staff, there was a lack of accountability ensuring that action steps were being implemented to meet goals. There was limited evidence that SIT goals, objectives, and action plans drove fiscal decisions at the school through the Cabinet. This was not accomplished in an “all inclusive” manner according to one of the teachers. She perceived that decisions were made by the administration prior to the convening of the Cabinet. Both the principal and staff did not perceive the funding for the school to be adequate. Any additional resources were targeted to decrease class size and support technology.

Figure 17. One-dimensional typology scale of themes for Bay Elementary School.





Summary of In Need of Improvement Schools

A comparison between Ocean and Bay Elementary Schools revealed several similarities and differences regarding their approach to school improvement planning and implementation of fiscal decisions. Personnel at both sites appeared to be aware of the school improvement goals. Ocean's School Improvement Team was more active than the committee used at Bay Elementary School. A member of the SIT at Bay revealed that the committee only met a few times during the school year.

Both schools had a committee within the school-governance structure to examine fiscal matters. Ocean had a Learning Improvement Team and Bay had the Cabinet; both committees met weekly. A difference existed in the execution of the aforementioned committees and their processes. The Learning Improvement Team at Ocean provided feedback and input to the administration. As a result, the administration would follow through with expenditures. The Cabinet at Bay Elementary was established to approve "all fiscal expenditures," yet, the principal admitted how some decisions "just need to be made in regard to core curriculum or sustaining programs."

The school improvement processes at both sites were much different. The plans from both schools concentrated on nearly the same goals; however, the implementation phase at Bay admittedly lacked cohesion, according to the administration and a teacher on the committee. Ocean's school improvement implementation continuously focused on the Hispanic and non-English speaking population. It appeared that more oversight and ongoing accountability were present on the Ocean campus.

CHAPTER 9

PHASE II - CASE-STUDY FINDINGS AND ANALYSIS

In an attempt to portray similarities and differences between the accountability subgroups, Yin (1994) described a procedure for the researcher to analyze qualitative data by developing themes from the case studies. By using the open coding procedure, six themes were constructed from the case studies. The case studies were also analyzed according to the conceptual framework of Odden et al. (2002) and typologies were developed to compare and contrast schools within accountability subgroups.

Constructed Themes

After the interviews were transcribed, the verbatim text was sorted and ordered, thus leading to several readings of the narrative data. The following six constructed themes served as an organizing framework for the case studies (Creswell, 1998):

Theme 1 – Principal’s role

Theme 2 – Shared vision

Theme 3 – Structure for decision-making

Theme 4 – Context for decision-making

Theme 5 – Adequacy of funds

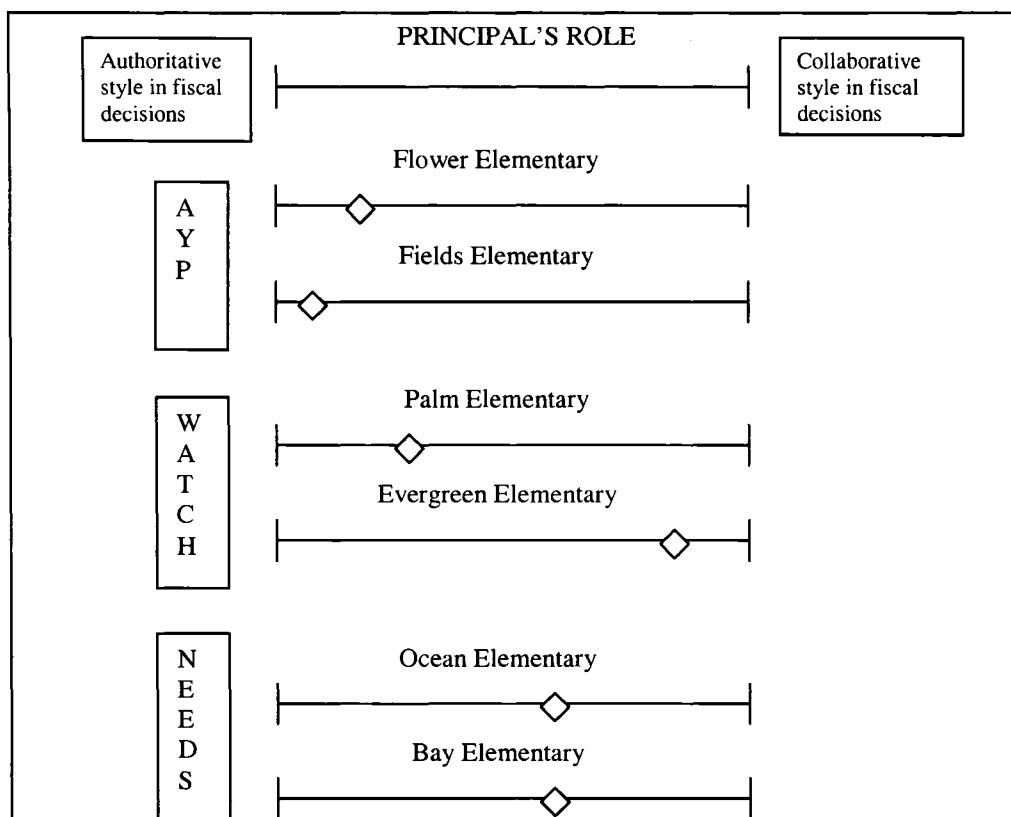
Theme 6 – Principal’s technical knowledge of fiscal issues

In addition to the six constructed themes, a one-dimensional typology scale was developed and verified through a process of inter-coder reliability (Creswell, 1998) for each theme to show the variation among cases along a continuum. For instance, the first theme's one-dimensional typology showed the degree to which a principal made fiscal decisions collaboratively.

Theme 1 – Principal's Role

Fiscal decision making varied among the six studied schools. It ranged on the typology scale from authoritative to collaborative in nature. Figure 18 provides a comparative chart for the six schools within the three accountability categories.

Figure 18. Comparative analysis of Theme 1 for the six studied schools within the three accountability categories.

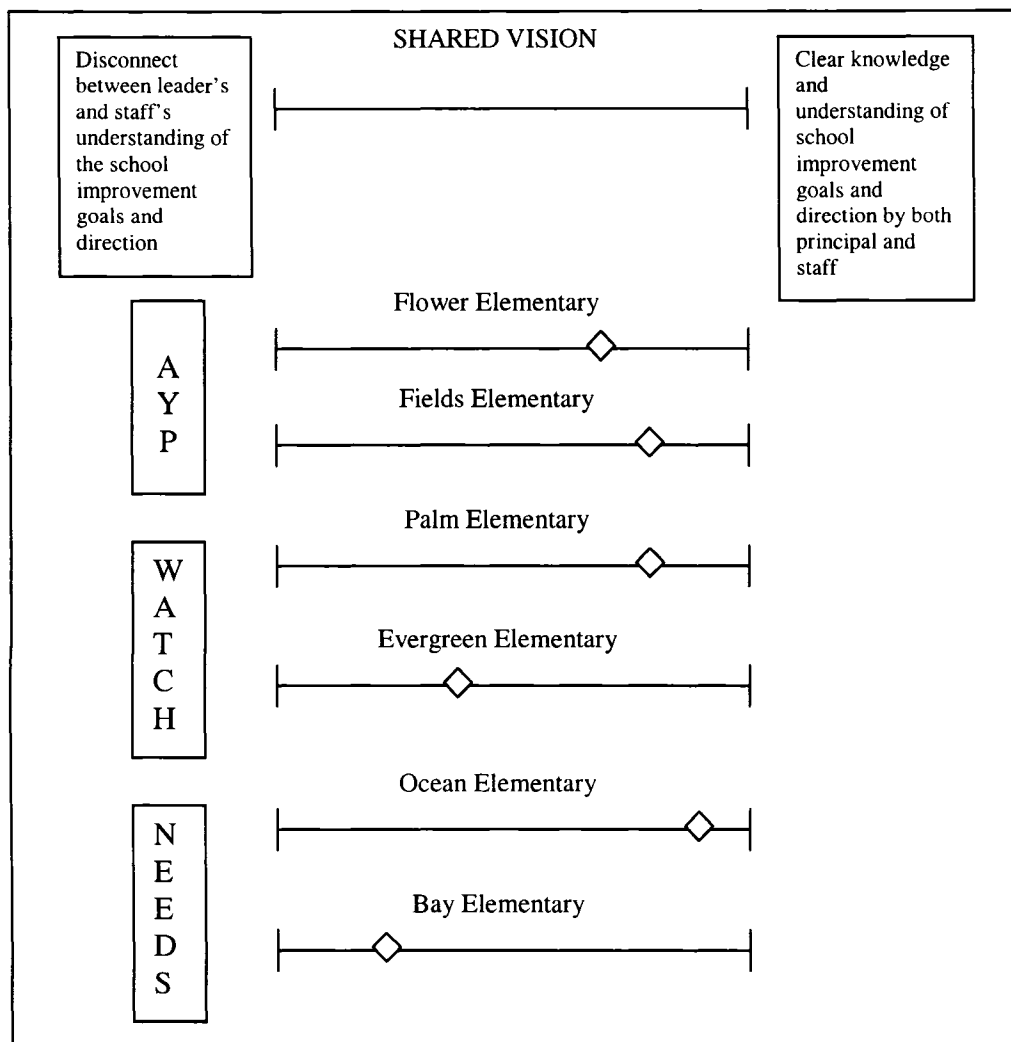


The matrix for Theme 1 shows how schools meeting AYP had principals who tended to be more authoritative relative to fiscal decision making. Fields Elementary had the most authoritative principal. Conversely, Evergreen Elementary had the principal with the most collaborative style. These findings suggest that AYP schools had leaders who tended to make fiscal decisions with minimum direct input from staff. A discerning issue related to fiscal decision making was the degree to which the decisions, regardless of who was making them, were clearly linked with the strategic focus of the school. Those schools with clear connections between allocations and goals to be achieved tended to perform better. In other words, clear linkages, not the degree of collaboration with faculty on the part of the school leader, appeared to be of primary importance. Both AYP principals had a clear vision of where their school was going as did the principal at In Need of Improvement school that moved out of that category.

Theme 2 – Shared Vision

Leaders and staffs at the case-study schools had varying degrees of knowledge and understanding of the school improvement process and goals. Several site visits and interviews revealed that some of the schools had personnel at the teaching and administrative levels who were fully aware of goals; however, other staff members were not aware or accurate in sharing what they believed to be the school improvement goals. Additionally, some of the personnel inaccurately shared information about school-wide programs when questioned about the school improvement goals at the school. Figure 19 provides a comparative chart for the six schools within the three accountability categories for this theme.

Figure 19. Comparative analysis of Theme 2 for the six studied schools within the three accountability categories.



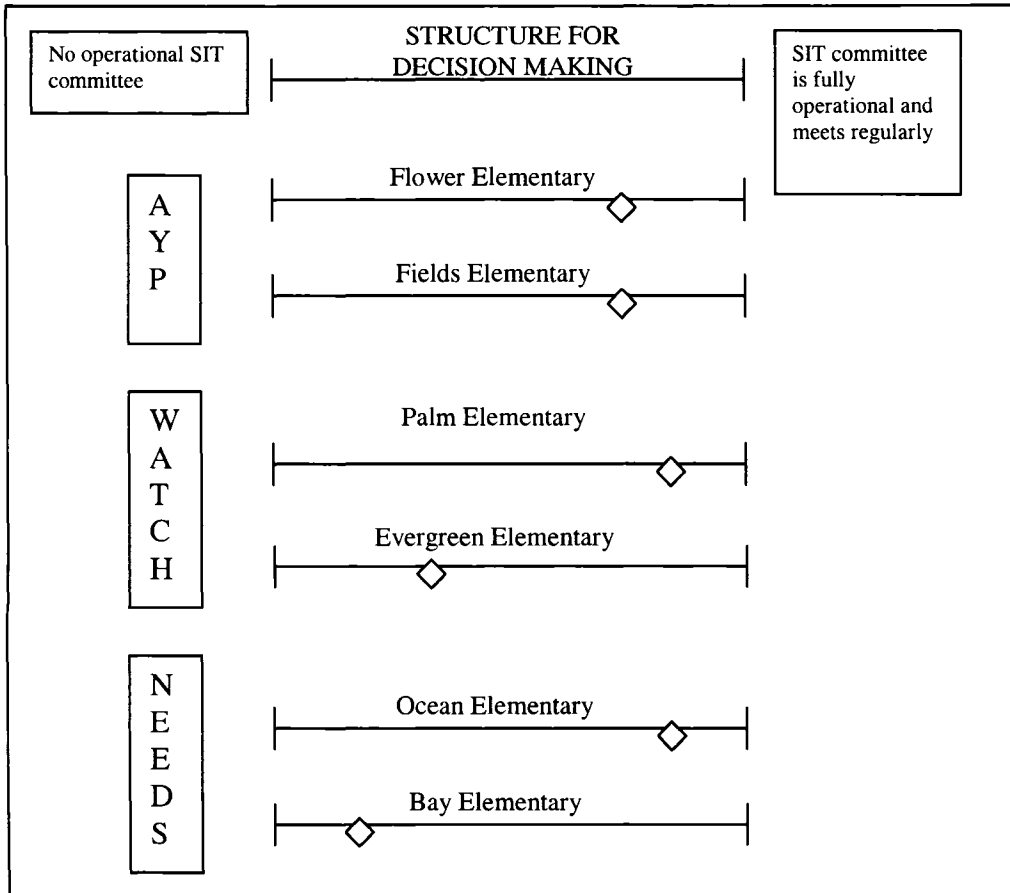
Theme 2 typologies show how schools meeting AYP and schools showing positive movement across subgroups had principals and staffs who were the most knowledgeable about school improvement goals and the execution of those goals. Bay Elementary had the most disconnect between the principal and staff. Admittedly, the principal at Bay realized that there was a problem, i.e. that the vision of the school was not completely shared. It appeared that Bay Elementary had a break down in the school improvement

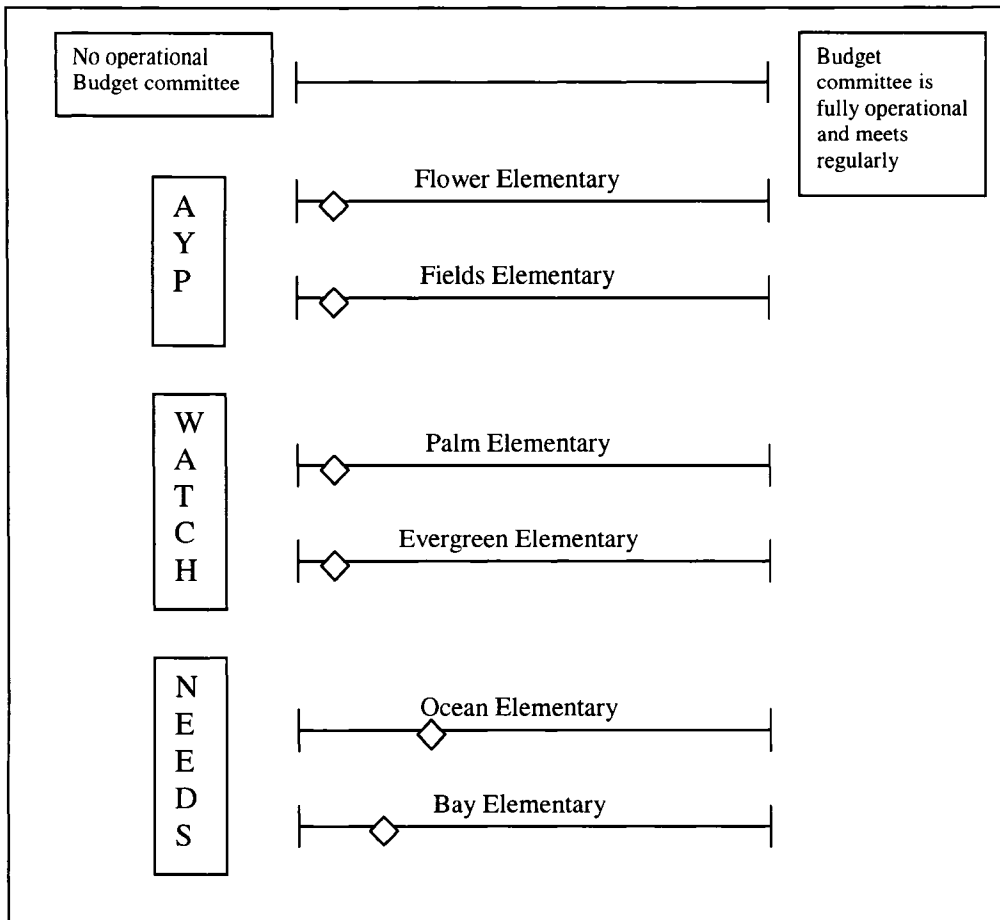
process with limited accountability for staff regarding the school improvement goals. Thus, Flower and Fields, both AYP schools, showed that leaders and staff both had common understandings of where they were going. Palm, a Watch List school that moved off of the Watch List to AYP status, and Ocean, an In Need of Improvement school that moved out of that subgroup to Watch List status, also had strong shared visions of school goals and directions for school improvement efforts. These schools validate the notion that you cannot arrive at your destination if you do not know where you are going.

Theme 3- Structure for Decision Making

This theme was the most concise in determining each school's placement on the typology continuum for each school. Simply, the scale of this theme determined whether or not a school had a functioning School Improvement Team and School Budget Committee. Some of the schools did, however, have committees that partially focused on budgetary issues, and this was considered when determining placement on the typology scale. If there were some other committee mechanism for input regarding fiscal decisions but no dedicated Budget Committee *per se* the diamond was placed toward the center point from the left side of the continuum. Figure 20 provides a comparative chart for the six schools within the three accountability categories for the two strands of Theme 3.

Figure 20. Comparative analysis of Theme 3 for the six studied schools within the three accountability categories.





All of the schools had a School Improvement Team and the SIT committee was used consistently by both schools meeting AYP. The two schools in the other accountability subgroups that made no movement in subgroup status had weak SITs that were not productive or did not meet regularly.

The two schools In Need of Improvement did not have a full functioning budget committee; however, a school governance committee was used to make some decisions regarding the instructional budget at Ocean. The policies and regulations in the studied school district did not call for a budget committee at elementary school sites. The only requirement set forth in district policy related to a committee focused on school-

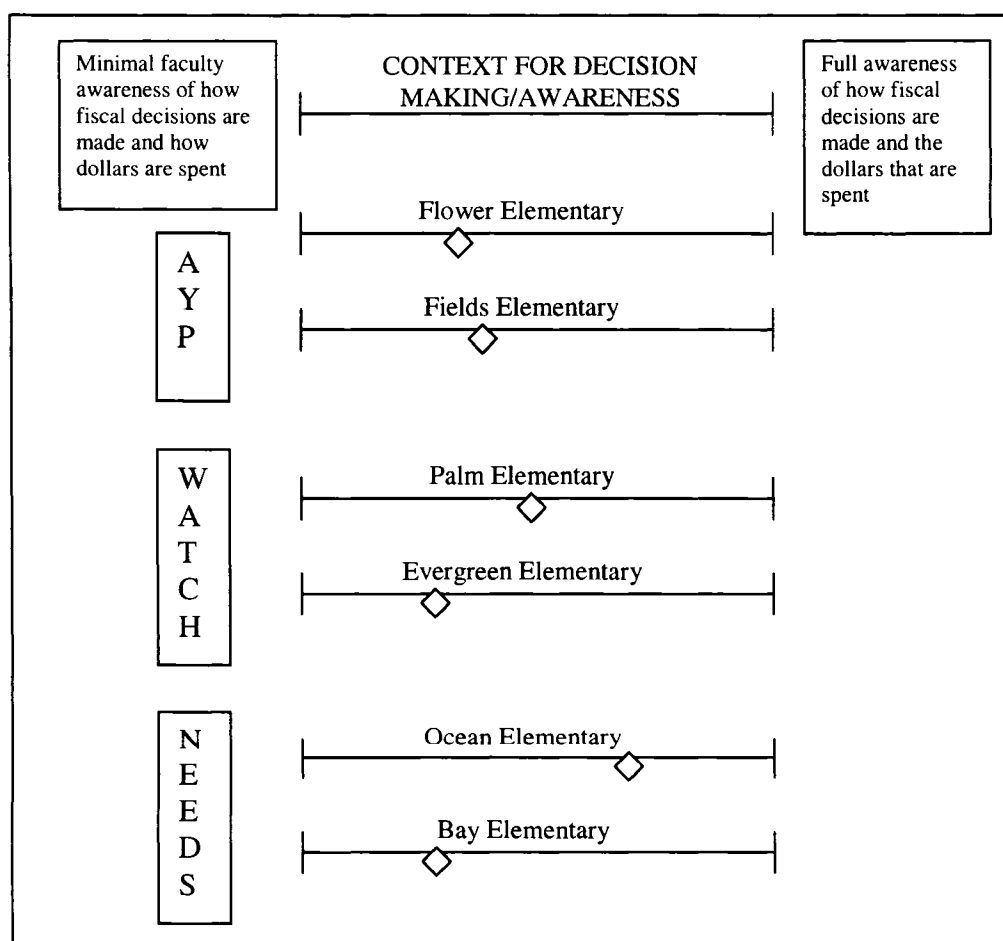
generated funds. As a result, all studied schools did not have a budget committee that focused on overall instructional expenditures.

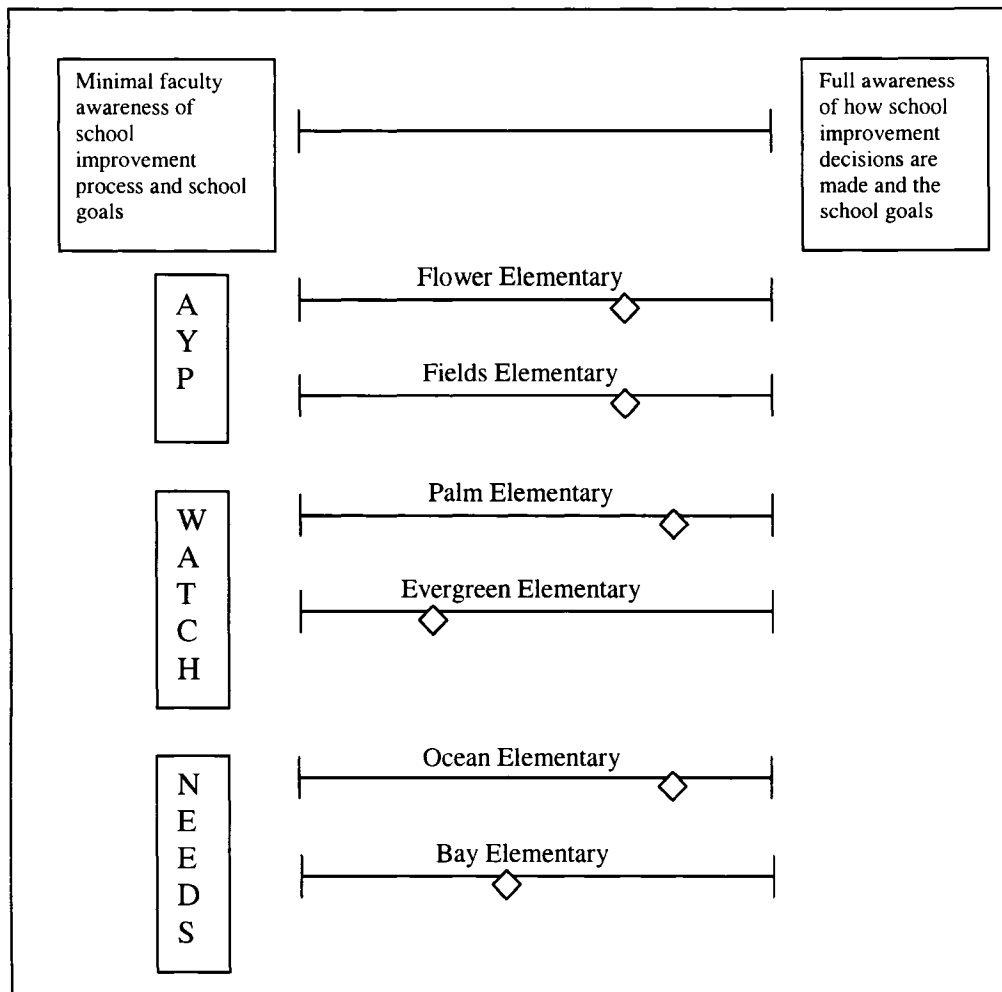
Theme 4 – Context for Decision Making/Awareness.

This theme concentrated on one of the three sub-themes. The theme focused on the fiscal and school improvement awareness of the staff. Figure 21 provides a comparative chart for the six schools within the three accountability categories for the sub-theme:

Context for Decision Making/Awareness.

Figure 21. Comparative analysis of Context for Decision Making/Awareness for the six studied schools within the three accountability categories.



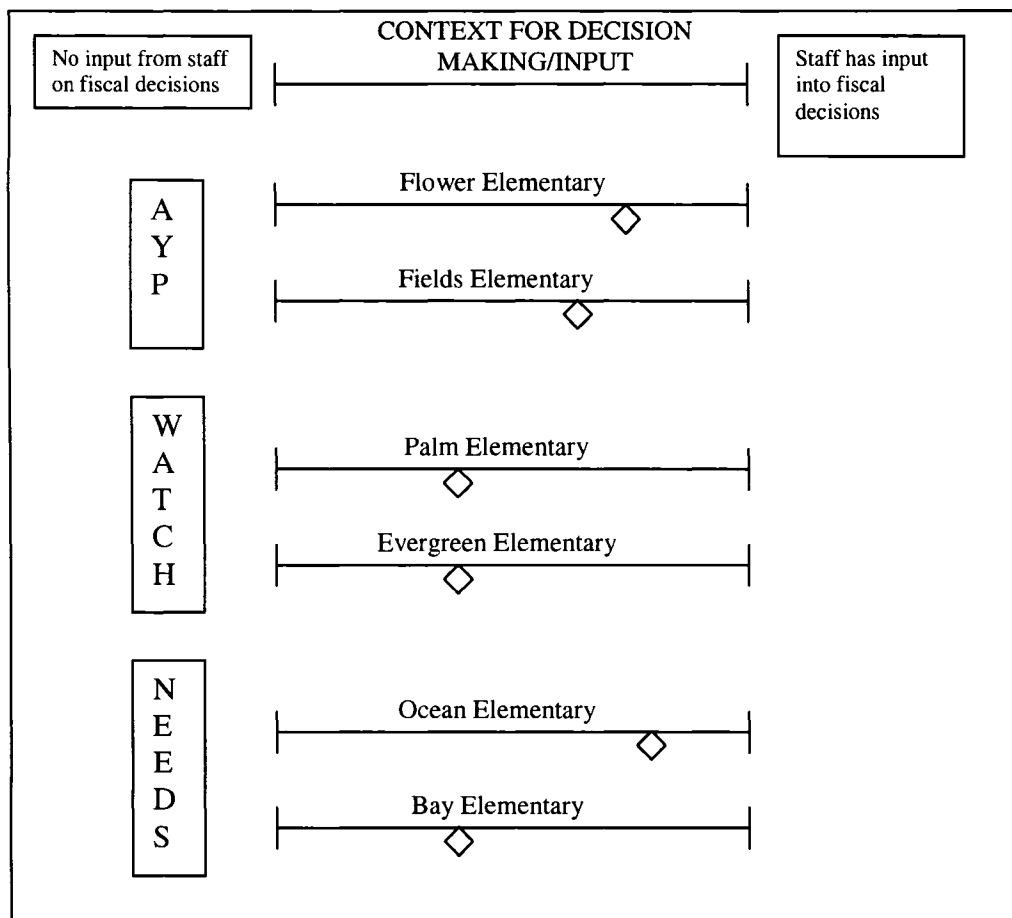


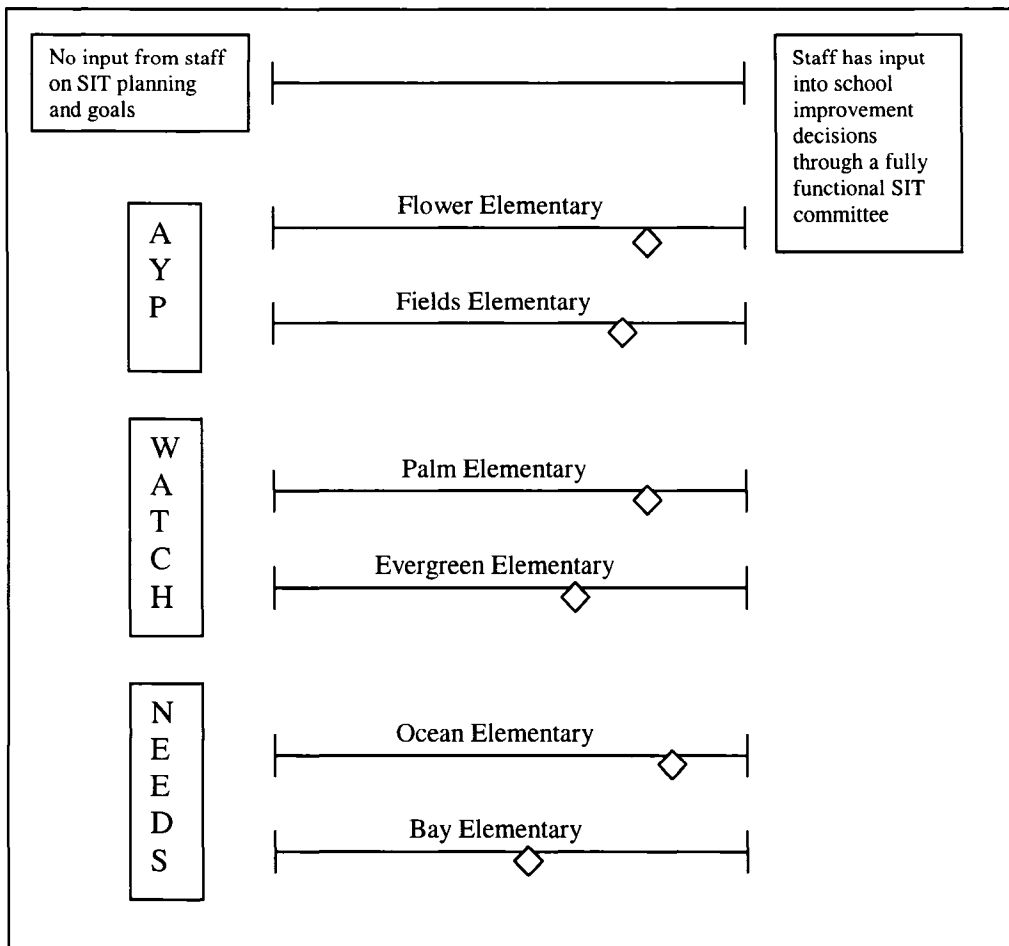
The sub-theme dealing with the awareness of the staff concerning fiscal and school improvement decisions revealed that Ocean Elementary School personnel were the most aware of how fiscal decisions were made at the school. Ocean, along with Palm Elementary, had a staff that was most aware of the school improvement decisions and how they were made. Evergreen and Bay Elementary Schools' faculty were the least aware of the fiscal and school improvement decisions made at the school. Flower and Fields (AYP schools) were collectively aware of the school improvement decisions; however, this pair of schools was less aware of the fiscal decisions implemented at the school site.

Theme 4 – Context for Decision Making/Input.

This theme focused on one of the three sub-themes of *Content for Decision Making*: the fiscal and school improvement input levels provided by staff. Figure 22 provides a comparative chart for the six schools within the three accountability categories for the *Context for Decision Making/Input* sub-theme.

Figure 22. Comparative analysis of Context for Decision Making/Input for the six studied schools within the three accountability categories.





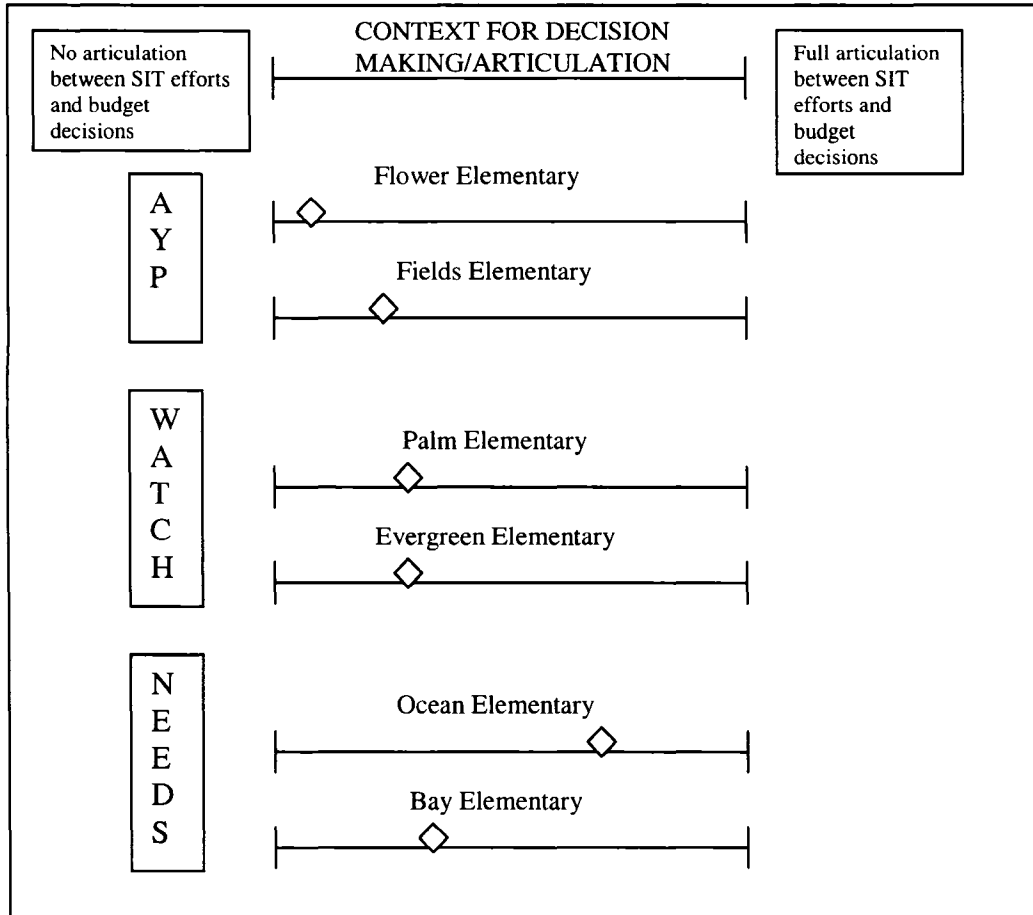
Both schools meeting AYP (Flower and Fields) had continuum points closest to the right side for fiscal and school improvement input; therefore, these two AYP schools promoted input into both the fiscal and school improvement processes. Ocean and Bay both had committees that addressed fiscal issues as part of their function. Other case study schools entertained input on fiscal issues either informally or embedded in school improvement discussions.

Theme 4 – Context for Decision Making/Articulation.

This theme concentrated on one of the three sub-themes of *Context for Decision Making*: the connection between budget decisions and school improvement efforts.

Figure 23 provides a comparative chart for the six schools within the three accountability categories for the *Context for Decision Making/Articulation* sub-theme.

Figure 23. Comparative analysis of *Context for Decision Making/Articulation* for the six studied schools within the three accountability categories.



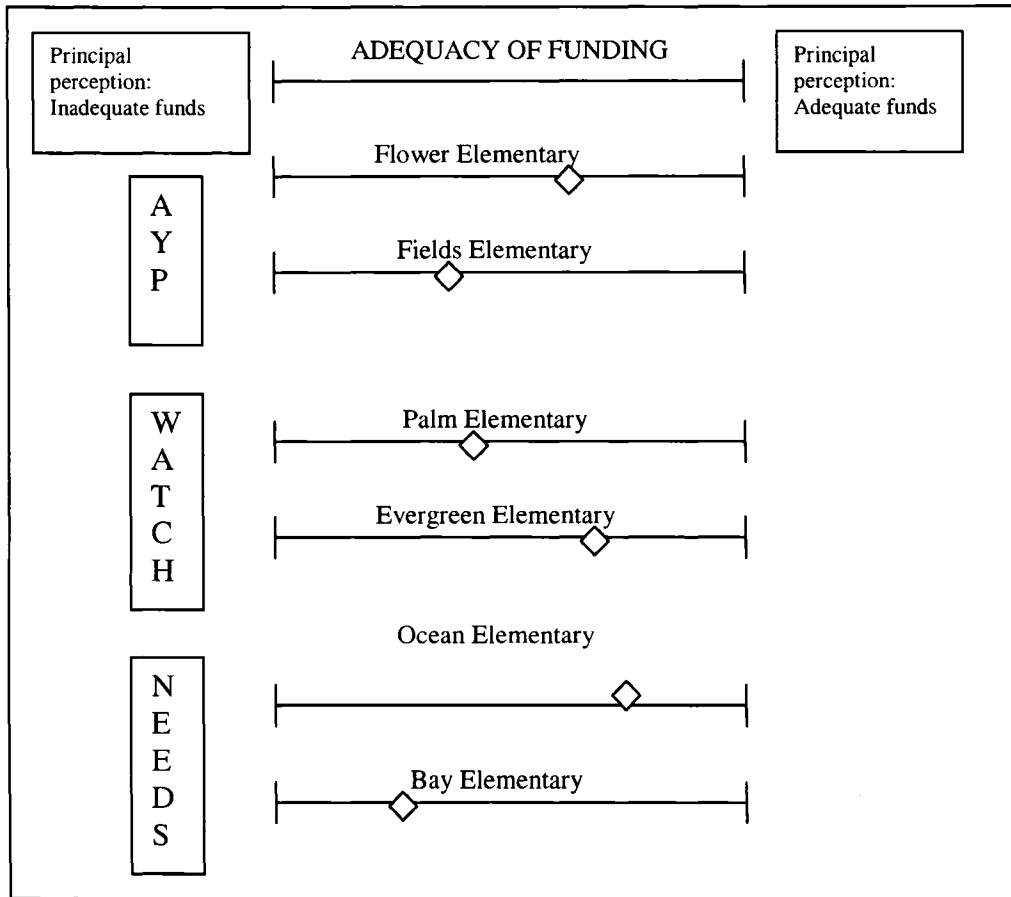
Collectively, the schools did not fully connect the work of the SIT to a budget committee. While some schools had governing bodies to make some fiscal decisions, budget committees *per se* did not exist in the studied elementary schools. The administration at Ocean Elementary implemented a Learning Improvement Team to

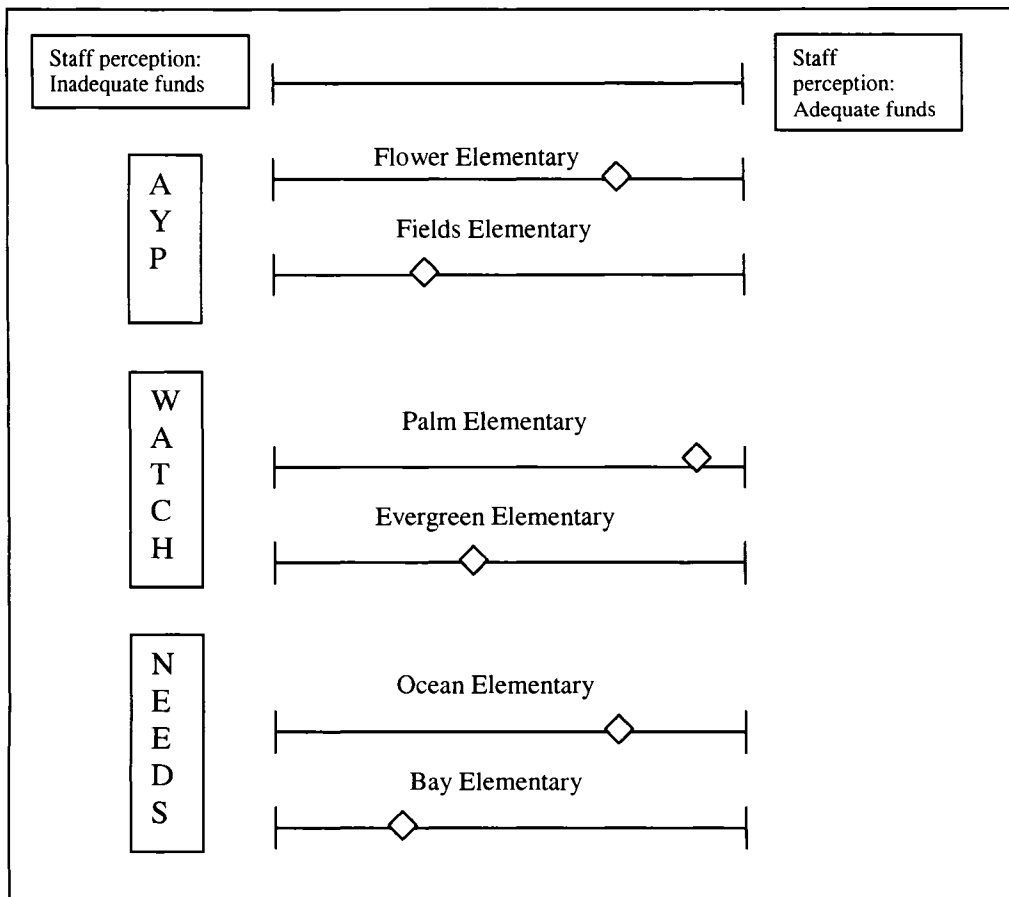
analyze fiscal decisions at the school and thus showed the most articulation between school improvement efforts and budgetary decision making. Bay Elementary had a Cabinet, and the administration claimed that this group approved fiscal decisions related to school improvement; however, in reality the administration had already made most of the fiscal decisions prior to the convening of the Cabinet. The administration used the Cabinet as a means to explain fiscal decisions and as a vehicle to then relay the information back to the faculty.

Theme 5 – Adequacy of Funds

This theme focused on the perceptions of principals and staff at studied elementary schools regarding adequate funding. Figure 24 provides a comparative chart for the six schools within the three accountability categories for the theme.

Figure 24. Comparative analysis of Theme 5 for the six studied schools within the three accountability categories.





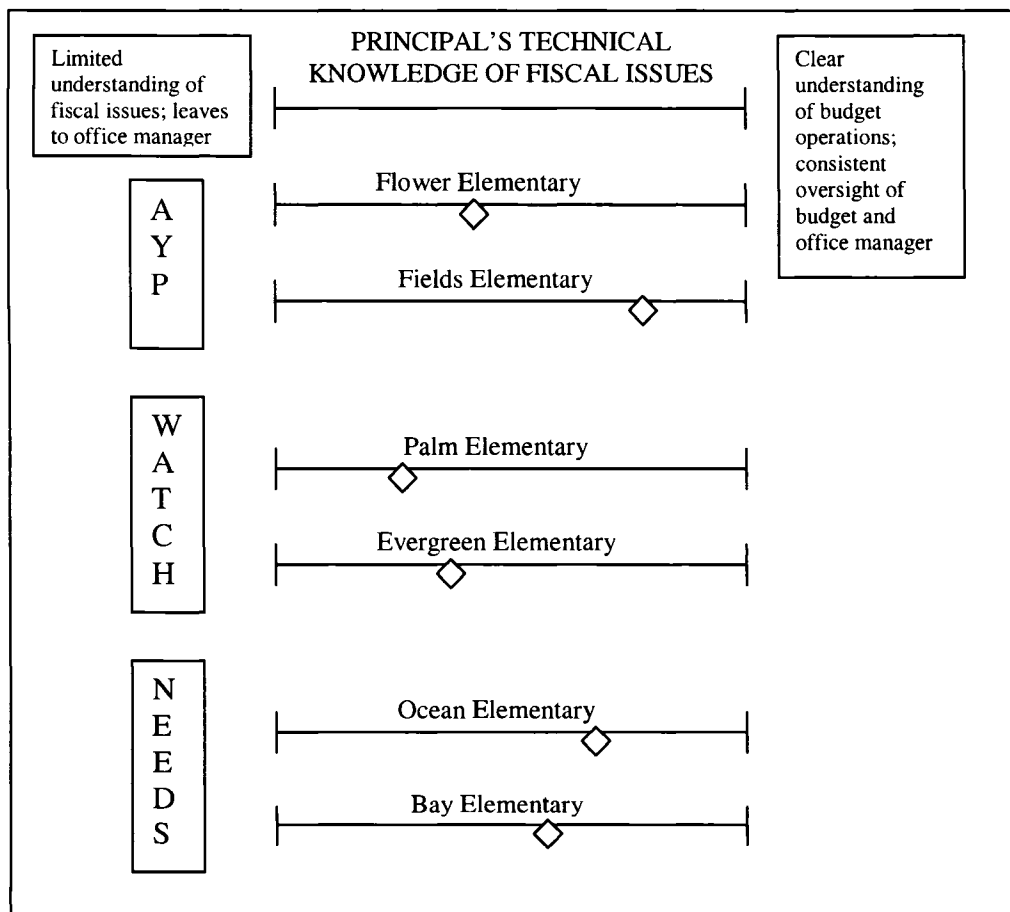
The perceptions regarding adequacy varied at the studied elementary schools. School leaders displayed split results regarding their perceptions of adequacy of funding.

The perceptions of the staffs for adequacy were split in each accountability subgroup. The staffs at Flower, Palm, and Ocean perceived that the funding levels were adequate. These perceptions centered around whether or not resources and materials requested were consistently ordered and available. In other words, if a teacher requested a supply or material and it was provided, the teacher perceived that the funds were adequate. Teachers' perceptions of adequacy were based on their individual needs more than the broader perspective of the adequacy of school funds to carry out the overall programs of the school.

Theme 6 – Principal’s Technical Knowledge of Fiscal Issues

The theme focused on the knowledge base exhibited by the principals of the studied elementary schools. Some of the schools had principals who relied on the office personnel to make budgetary decisions, while other principals had a stronger skill set related to budgetary practices and procedures. Figure 25 provides a comparative chart for the six schools within the three accountability categories for the theme.

Figure 25. Comparative analysis of Theme 6 for the six studied schools within the three accountability categories.



Overall, most of the principals at the studied schools placed a large amount of responsibility on the office manager for fiscal decision-making. The principals at Ocean, Bay, and Fields exhibited the most technical knowledge regarding budgetary processes and procedures. The principals at Palm, Evergreen, and Flower showed the least amount of technical knowledge related to budgeting and budget construction skills.

While no patterns emerged when comparing accountability subgroups, the researcher was intrigued by the lack of technical knowledge displayed by elementary school leaders. This factor may be attributed to the culture of the studied school district. It was apparent that principals were not provided with periodic training to assist them with the budgetary processes. Also, there was a perception among school leaders that there was little discretion in the budget other than supplies and materials and textbook dollars. The budget process was a very centralized function in this district. Additionally, the hiring practices in the studied school system did not focus on budgetary knowledge. Rather, the leaders of schools were selected as a result of instructional philosophy, pedagogy, and methods to improve instructional programs.

Odden's School Resource Indicators

Finally, Odden et al.'s (2002) School Resource Indicators were compared for connection to the specific school and accountability subgroups of the No Child Left Behind Act (See Table 14).

Table 14. School Resource Indicators (Odden et al., 2002) comparison among the six studied elementary schools.

School Resource Indicators						
Case-Study Schools						
	AYP		WATCH		NEEDS	
Name of School	Flower	Fields	Palm	Evergreen	Ocean	Bay
School Building Size	N/A	N/A	N/A	N/A	N/A	N/A
School Unit Size	796	702	536	760	717	637
Low-Income Concentration	38%	52%	57%	63%	72%	62%
Percent ESL/LEP	20%	33%	12%	49%	43%	30%
Percent Special Education	11%	13%	12%	9%	11%	11%
Expenditures Per Pupil	\$5622	\$5961	\$6071	\$5662	\$5782	\$5571
Professional Development Expenditures Per Teachers	\$1180	\$1470	\$1064	\$940	\$913	\$1060
Special Academic Focus of School/Unit	N/A	N/A	N/A	N/A	N/A	N/A
Length of Instructional Day	6 hrs. and 6 mins.	6 hrs. and 11 mins.	6 hrs. and 16 mins.	6 hrs. and 11 mins.	6 hrs.	6 hrs.
Length of Class Periods	N/A	N/A	N/A	N/A	N/A	N/A
Length of Reading Class (Elementary)	95 min.	185 min.	90 min.	90 min.	160 min.	140 min.
Length of Mathematics Class (Elementary)	70 min.	90 min.	80 min.	60-90 min.	70 min.	70 min.
Reading Class Size (Elementary)	25	24	20-35	22	24	24
Mathematics Class Size (Elementary)	25	24	20-35	22	24	24
Regular Class Size (Elementary)	25	24	20-35	22	24	24
Percent Core Teachers	83%	76%	59%	82%	72%	63%

Table 14 revealed that school principals in the district under study did not have a great deal of discretion regarding the instructional budget. District policy mandated the length of the school day, class sizes, and the number of core teachers. As a result, the aforementioned data relevant to the School Resource Indicators showed little variation. However, some discretion was increased for many of the principals who were awarded the state-remediation grants that provided funds for additional staffing and smaller class sizes for reading. Additionally, one of the studied schools obtained funding for an extended literacy program. Another program had a tuition-based kindergarten program for the next school year. Simply, the grants served as vehicles to increase discretion among the school principals and did, in fact, change the data for the School Resource Indicators.

Fields Elementary School had external funds to run an extended reading program for all of its students and had the longest reading period. Fields, a school meeting AYP, extended the reading class time by implementing a school-wide program in which students were homogeneously grouped in grades first through fifth.

The School Resource Indicators of Odden et al. (2002) supported that class sizes be reduced in core-curricular areas. Three of the schools were able to achieve the goal of creating smaller class sizes in reading by gaining additional teachers for the intermediate-grade levels through state grants. In addition to Fields Elementary, the lengths of the reading classes were also increased in the three schools participating in the state reading grant that focused on the primary-grade levels. As a result of the increased funding and staffing at these schools, students were exposed to longer reading classes.

Another area of interest is dollars spent on the professional development of teaching staff. AYP schools spent slightly more on professional development. Also, AYP schools tended to have a higher percentage of core teachers. An exception to this was Evergreen, a Watch List school, that also had 82% core teachers.

Summary

Using open coding, six themes were constructed for the six case-study schools. One-dimensional typologies were developed to show the similarities and differences among the case-study schools across the six themes. The cross-case analysis revealed how the themes varied among the schools and the accountability subgroups. AYP schools and schools showing positive movement across subgroups tended to have a strong shared vision, a fully operational SIT that met regularly throughout the year, and a faculty that was aware of school improvement goals and action steps necessary to meet school improvement efforts. There was little evidence indicating that school improvement goals drove fiscal decision making at the school sites in this study. Adequacy was truly in the eyes of the beholder and tended to be influenced by self need. Principals on the whole did not have high levels of fiscal literacy or competence.

Finally, the School Resource Indicators proposed by Odden et al. (2002) were used to report the structure and expenditures at school sites. The findings of this segment confirmed the earlier quantitative phase of this study in that they showed that schools had limited discretion over the instructional budget. However, some of the schools attempted to address research-based allocations related to the length of reading classes and smaller class sizes. Schools that had received external funding were able to make such research-

based allocation decisions. Thus, it appeared that schools that were able to increase their discretionary power over resource allocation through external funding sources were allocating those additional dollars in areas that research had demonstrated impacted student learning outcomes. The question that arises for this researcher is: *Without the infusion of extra dollars, could a school leader achieve the same results if granted greater autonomy and discretion over the school budget?*

CHAPTER 10

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The findings of this study were generated from two different phases. The first three research questions were addressed in phase I of the study that involved a quantitative analysis of the In\$ite database. The last four research questions were addressed in phase II of the study involving case studies of six elementary schools matched on a set of demographic characteristics and representative of the three sub classifications of school performance delineated in the No Child Left Behind Act.

Summary of the Findings

Research Question 1

How were fiscal allocations distributed among expenditure categories in elementary schools in a large urban district?

As substantiated by a descriptive analysis of the mean, median, variance, standard deviation, minimum, maximum, and range (See Tables 1-3), fiscal allocations among expenditure categories in elementary schools (N = 173) in the large urban district under study were distributed unevenly. The four main categories of In\$ite were compared among all schools. The *Instruction* category had a range of \$4331, the *Instructional Support* category had a range of \$1135, the *Operations* category had a range of \$1888, and the *Leadership* category showed a range of \$1018. The range in per pupil for total

spending was \$6906 among all of the elementary schools in the studied system, and the mean per-pupil expenditure was \$5990.

A further analysis of the more specific eight expenditure variables revealed the proportion of spending in each expenditure category by per-pupil figure and percentage of the total funding. The *Face-to-Face Teaching* expenditure category accounted for 58% of the total budget and had a mean of \$3470. In contrast, the *Teacher Support* expenditure variable accounted for the smallest expenditure and consumed 1% of the total school-district budget with a mean of \$87 per pupil. Overall, the proportion of expenditures within each of the eight subcategories was as follows for all of the elementary schools in the studied school district (N=173):

58% Face-to-Face Teaching

8% Non-instructional Pupil Services

8% School Management

7% Facilities

7% Classroom Materials

6% Program Support

5% Pupil Support

1% Teacher Support

Research Question 2

How were fiscal allocations distributed among expenditure categories in three subgroups of elementary schools in a large urban district?

The findings from a descriptive analysis examining mean, median, variance, standard deviation, minimum, maximum, and range (See Tables 1-3), fiscal allocations within

expenditure categories among the three subgroups of elementary schools revealed that schools categorized as In Need of Improvement spent more per pupil in nearly every expenditure category of the In\$ite database.

The In Need of Improvement schools spent nearly \$1,000 more per pupil for total expenditures. Hence, the schools In Need of Improvement spent more per pupil across all but one of the expenditure variables (*Program Support*) when compared to the other accountability subgroups. The Watch List schools and AYP schools exhibited mixed results as far as fiscal allocations among the expenditure categories. The mixed results supported the premise that AYP and Watch List schools spent nearly the same per pupil within the expenditure variables. See Table 15 for an expenditure comparison among the three accountability subgroups.

Table 15. The statistical mean and range for the eight expenditure variables among the three accountability subgroups.

InSite Expenditure Subcategories	Descriptive Statistics	AYP Schools (N=124)	Watch Schools (N=23)	Needs Schools (N=26)
Face-to-Face Teaching	Mean	3407.37	3269.84	3942.98*
	Range	2754.66	2190.16	2154.37
Classroom Materials	Mean	384.25	320.49	544.44*
	Range	898.73	312.30	604.88
Pupil Support	Mean	271.36	260.48	316.50*
	Range	161.46	171.76	239.96
Teacher Support	Mean	82.32	74.14	118.29*
	Range	280.87	71.13	229.00
Program Support	Mean	350.38	385.61*	371.78
	Range	969.47	372.54	768.09
Non-instructional Pupil Services	Mean	512.97	410.64	542.36*
	Range	1342.34	610.84	421.41
Facilities	Mean	408.33	431.61	443.72*
	Range	721.13	410.39	705.35
School Management	Mean	473.01	451.63	525.65*
	Range	765.89	570.08	411.32

Note. An asterisk shows the highest mean among the three accountability subgroups.

Research Question 3

What were the differences and/or similarities in expenditure patterns among the three subgroups of schools in a large urban district: those making Adequate Yearly Progress, those on the Watch List, and those In Need of Improvement?

The one-way, simple ANOVA results, with a Tukey *a* post-hoc test, revealed that significant differences existed among four of the eight subcategories within the InSite

database. Specifically, *Face-to-Face Teaching*, *Classroom Materials*, *Pupil Support*, *Teacher Support*, and *School Management* were determined as significantly different between groups. The results for the remaining three categories *Program Support*, *Non-instructional Pupil Services*, and *Facilities* showed no statistically significant differences across the three subgroups of schools.

The one-way, simple ANOVA post-hoc results also showed how the significant differences were displayed. Major differences in spending levels were noted between schools meeting AYP and those schools In Need of Improvement. As well as the significant difference between the AYP schools and the In Need of Improvement schools, the ANOVA post-hoc results significantly demonstrated spending variation when comparing Watch List and In Need of Improvement schools. Conversely, Watch List and AYP schools did not show significant spending differences within any of the expenditure variables. The In Need of Improvement subgroup (N=26) spent significantly more than the other groups of schools in the two remaining accountability subgroups.

A discriminant analysis was also used to determine similarities and differences among the expenditure patterns for schools in varying accountability subgroups. The *Pupil Support* and *Face-to-Face Teaching* expenditures within In\$ite contributed the most in predicting a school's membership in one of the three accountability subgroups for No Child Left Behind. Schools were likely grouped according to the No Child Left Behind accountability subgroups i.e. achieving AYP, on the Watch List, or In Need of Improvement as a result of their spending levels in the *Face-to-Face Teaching* and *Pupil Support* In\$ite categories. The *Face-to-Face Teaching* category is comprised of teachers, instructional aides, and substitutes. The *Pupil Support* category is comprised of guidance

counseling, extracurricular activities, student health services, and library/media services offered to students. The In Need of Improvement schools were spending the most money in these categories.

It is not appropriate to extrapolate from these findings because trend data are not available for In\$ite. At the time of this study, there was only one year of reliable data available. The increased funding was, in part, the result of state policy decisions that drove additional dollars out to struggling schools. Once multiple year In\$ite data become available, trend analysis could be used to determine if there is any differentiated impact across subgroups of schools over time relative to how they allocate dollars and school performance.

Research Question 4

In selected case-study schools from the three subgroups of a large urban district, what was the governance structure and process for developing school budget priorities and school budgets?

The case studies revealed that none of the sample schools had formal budget or finance committees to develop budget priorities and/or give input into fiscal decisions. Specifically, the third constructed theme, *Structure for Decision Making*, attempted to gauge if a school had, and to what extent used, a School Budget Committee.

School site budget committees were not encouraged in district policy. Policy did require a school-generated funds committee for discretionary school funds, and schools did maintain those committees (Clark County School District, n.d.). School principals assumed primary responsibilities in determining budget priorities and school budgets;

however, many of the office managers had extensive responsibilities for budget decisions.

A request or “wish-list” system of budget allocations was a part of the culture of many of the case-study schools for the dissemination of student-generated funds. These “wish lists” were often reviewed by the office managers and then purchased as funds allowed. Teachers were not required to support requests with rationales tied to school improvement priorities or the teacher’s instructional goals.

Only two schools had a committee that was responsible for examining and approving instructional expenditures. These committees were comprised of grade-level representatives and other personnel of the school. Budget items were discussed within the meetings, but neither committee had instructional budget decisions as its primary focus. One school’s agenda had minimal budget items, and the committee members did not approve expenditures. The other school had an approval process for instructional budget expenditures; however, some expenditures/transactions were determined by administration without committee approval. As an observer at several of these meetings, the researcher concluded that minimal time was allotted for discussion relevant to fiscal expenditure decisions or how those decisions might impact their school improvement efforts.

While not all schools had formal mechanisms for addressing budget issues, those schools at AYP or showing positive movement across subgroups i.e. moving off of the Watch List or out of In Need of Improvement, had informal avenues of input regarding resource needs and allocations.

Research Question 5

In selected case-study schools from the three subgroups of a large urban district, what was the governance structure and process for developing school improvement plans?

All of the studied elementary schools had a functioning School Improvement Team whose task was to develop an annual plan consisting of school improvement goals. The school improvement planning for some schools began prior to the school year. Additionally, the meeting frequency of most committees was greatest at the beginning of the school year during the writing of the plans.

Some schools convened more in the spring as the test data arrived for analysis; however, it was clear that most of the teams were not formally meeting at the time of this study. Reportedly, one of the schools “rarely” met during the school year to discuss the plan or implementation process of the plan.

The school improvement plans for all schools had similar goals that focused on the core-curricular areas of reading, writing, and mathematics. A uniform template was used for the entire school district; therefore, the plans varied little in appearance and content.

As far as the school improvement process itself, staff at AYP schools and school showing positive movement across subgroups were most aware of their school’s improvement process. Additionally, the principals at these schools had a clear vision of the school improvement process and goals. The schools that remained on Watch List or In Need of Improvement were not fully aware of either the school improvement process or the school’s goals. In some instances, staff and principals at these schools described

school improvement efforts in terms of commercial programs used rather than goals to be achieved and action steps to be accomplished.

School leaders may need to address the “silver bullet” mentality existing in some struggling schools. Schools often buy the latest commercial programs to boost achievement, but striving to obtain more resources and commercial products could dilute the focus from strategic school improvement goals and action steps. Once again, the In Need of Improvement schools had more human and material resources, but the focus on goals may have been diverted by the multiple programs being implemented on the campuses. Removing the focus from the school improvement process to program implementation may inadvertently create a school improvement plan that is merely a written document than an ongoing process in a school. It is interesting to note that the AYP schools put more resources into the professional development of their staffs.

Research Question 6

In selected case-study schools from the three subgroups of a large urban district, what was the relationship between the school improvement planning process and the fiscal decision-making process?

It appeared that the school improvement planning and implementation occurred in isolation. Often the school leaders and committee members viewed it as appropriate to develop a plan without considering its financing. The qualitative portion of the study involved an open coding process that constructed six themes observed at the case-study schools. One of those themes, *Context for Decision Making*, examined the awareness, input, and articulation concerning the school improvement process and the fiscal decision making occurring at elementary-school sites.

Awareness.

AYP school personnel were aware of the process of how school improvement decisions were made at the school site. Conversely, the AYP schools' personnel were not aware of the process involving fiscal decisions. According to the comparative, one-dimensional typology for the *Context for Decision Making* theme, the school staff at Ocean Elementary School, in the In Need of Improvement accountability subgroup was most aware of the fiscal decisions being made at the school. This was because Ocean had a Learning Improvement Team whose partial function was to provide input into how resources should be allocated. Therefore, while case-study schools were aware of the processes to establish school improvement decisions and the role of the SIT, these same schools, with the exception of Ocean, displayed limited understanding or *awareness* concerning the fiscal decision-making process at the school.

Input.

The level of input to school improvement and fiscal decisions was highest among the staff at AYP schools. While only two schools had a committee structure that looked at fiscal issues the other case study schools had many informal mechanisms for staff input. Personnel from a school in the Watch List accountability subgroup and a school from the In Need of Improvement subgroup exhibited the lowest level of input into both the school improvement and fiscal processes at elementary schools.

Articulation.

Overall, there was limited *articulation* between the school improvement process and fiscal decision making at schools. The primary reason for the limited connection may have been the lack of a clear understanding on the part of the school leaders of what

impact fiscal decisions could have on school improvement efforts. The lack of fiscal autonomy, the school district's policies, and the limited budgetary knowledge of principals may have stifled the creation of a structure that promoted examining linkages between fiscal decisions and school improvement efforts. While some of the principals rationalized limited discretion over the budget as a rationale for the lack of a budget committee, the principals were not fully aware or comfortable with the budgetary processes themselves, but many acknowledged that they did have discretion over external funding sources.

Research Question 7

In selected case-study schools from the three subgroups of a large urban district, what were the similarities and differences in expenditures among schools in relationship to the school resource indicators taken from the extant literature?

Comparing the case-study schools' expenditure patterns and instructional characteristics with the School Resource Indicators developed by Odden et al. (2002), showed that fiscal decisions were similar among the case-study schools. The allotted instructional budget did not appreciably impact the School Resource Indicators. However, some of the schools did use their external funding sources (e.g., grants, state remediation funds, etc.) to create changes in the schools' structures and instructional characteristics based on Odden's research-based resource allocations.

The two schools meeting AYP both used funding to acquire additional staffing units to decrease class sizes, and one of the AYP schools extended the reading class period. Several of the schools were able to lower class sizes in the primary grades and lengthen the reading period as a result of a state reading grant.

Thus, when schools had discretionary dollars they attempted to use them for research-based resource allocations that impacted student learning.

Conclusions

The sequential, explanatory mixed-methods design used in this research study emphasized a linear process to analyze data, and promoted the isolated analysis of the quantitative and qualitative data. There is a need, however, to connect the two analyses and gather overlapping conclusions.

Entrepreneurial principals were able to increase discretionary spending through grants and other external funding to procure additional staffing, resources, and professional development.

At the conclusion of the case-study analysis, the researcher had a sense that the following observations were important but in need of further exploration or study since they were not observed or evident in all of the case-study sites:

- In progressing schools, SIP was an ongoing dynamic process not a document or event.
- In progressing schools, fiscal decisions were tied to strategic academic goals.
- In progressing schools, faculty had either formal or informal input into human or material resource needs.
- In schools that had clear shared visions, faculty was able to see how resource allocations related to school improvement efforts.
- Dollars targeted to research-based resource indicators impacted student achievement.

- Central administration directives that do not align with a school's improvement efforts may hinder the school's flexibility in targeting needed resources.

The In\$ite database that is now required by the state could be an educational resource for school principals with limited budgetary knowledge and budget construction skills yet few principals are aware of its existence. Several principals admitted that they were not familiar with fiscal processes and decisions. The data in Phase I may be useful in the professional development of site administrators so that they are aware of *how* their money is being spent at the site.

Finally, the connection between the school improvement process and fiscal decision making was virtually nonexistent in the case-study schools. If principals are expected to use human and material resources effectively and efficiently, they must understand how their fiscal allocations can influence school improvement efforts. More training and education must be provided to these school leaders so that the value of the connection between the two processes can be better understood.

Recommendations and Further Research

The findings of this study lead to a realization of other areas to be explored relative to school expenditures and the connection existing, if any, between the school improvement planning and implementation process with the fiscal decision-making process.

Conducting replication research in elementary schools of other school districts may assist with refining or expanding the constructed themes derived from the case studies. Expanding the research sample may confirm or negate some of the constructed themes and add to the trustworthiness of the study.

By implementing case studies at middle and high schools; perhaps, a broader perspective can be gained in relationship to the connection between school improvement efforts and fiscal decision making. By examining the governance structures of secondary schools and coupling that data with the findings of detailed qualitative research at those same schools, the findings of this study could be enhanced or found to be limited only to elementary schools and their leadership and school-governance structures.

The use of questionnaires at studied schools could also bring about different responses than the individual interview protocol used in this study. The responses on a random questionnaire from the staff at a studied school may have promoted responses from more of the stakeholders who did not serve on a committee or in a leadership role.

As well as the case-study expansion in the secondary-school level, a statistical analysis of the In\$ite data for middle and high schools within the accountability subgroups could also serve a purpose in determining the expenditure variables relevant to a sample of secondary schools. A comparison among the elementary, middle, and high school In\$ite figures could assist with the development of a model to ensure that expenditures are optimized and used most efficiently at schools.

As multiple years of reliable In\$ite data become available, trend analyses of schools over time related to student achievement could provide us with better defined variables to include in production function analyses of schools.

Finally, further research regarding school expenditure data will ultimately assist school leaders with the goal of eventually tracking expenditures to the student level. States and school systems continue to perfect the downward accounting methods promoted by In\$ite; however, it will still be some time in the future before schools are

able to track each dollar to individual students. Research of this kind will only expedite this process.

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