Resource Allocation: Practices in Urban Elementary Schools

Elizabeth Mascitti-Miller
St. John Fisher College

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Resource Allocation: Practices in Urban Elementary Schools

Abstract
Existing research indicates that improved student achievement in urban schools may be impacted by the strategic identification of school finances. Thus, the allocation of discretionary funds and the effectiveness of their use remains a critical element in school finance. This quantitative study examined practices that exist in the allocation of discretionary funds made by urban elementary principals. The study used a matched sampling methodology to provide an analysis of resource allocation in four schools in Good Standing and four schools not in Good Standing. The study found that principals in Good Standing primarily use their discretionary spending in the strategy Create Individual Attention as the primary means to create a high performing school. Further findings suggest that in order to create a highly individualized school environment, flexibility in spending provides principals with an opportunity to tailor the needs of their school more strategically. The findings offer principals, district administrators, and institutions of higher learning insights into the resource allocation practices of discretionary funds to create an individualized learning environment to improve student achievement particularly when enhanced by braiding school finance theories and practices.

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Resource Allocation:

Practices in Urban Elementary Schools

By

Elizabeth Mascitti-Miller

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by

Dr. Marie Cianca

Committee Member

Dr. Joellen Maples

Ralph C. Wilson, Jr. School of Education

St. John Fisher College

August 2012
Dedication

The dissertation process is an incredible experience and accomplishment. It was only possible because I am surrounded by a cadre of people who offer me love and support. To my husband, daughter, and son, I am incredibly grateful for the love and support they gave me throughout this process and my entire professional career. They make me proud to be a part of their family and I am forever thankful.

To my sisters, whom I love dearly, I am forever in their debt for the love and support they offered me during this journey and for the love they give me every day. To my parents, both who have been gone for many years, thank you for giving me the love of learning, the work ethic and the courage to go beyond what I thought was possible. Thank you for giving me the opportunities you never had, I think you would have been pleased with this accomplishment.

Lastly, I would like to give a special thanks to my committee for their patience and guidance during the dissertation journey. I am forever indebted to my chairperson, Dr. Marie Cianca for her undying support and tutelage. I couldn’t have done it without her.
Biographical Sketch

Elizabeth Mascitti-Miller is currently the Chief Education Officer for Early Childhood Education in the Chicago Public Schools. Ms. Mascitti-Miller received her undergraduate degree from Syracuse University in 1980. She continued her studies at Nazareth College and received her Master’s degree in 1986. In 1991 she completed her administration degree from SUNY @ Brockport and the University of Houston. She returned to school in 2010, and enrolled in the Ed. D Program in Executive Leadership at St. John Fisher College. In 1980, Ms. Mascitti-Miller began her teaching career at a school for students with severe disabilities, where she eventually became the Education Director for the Preschool Program. In 1993, she began her career in the Rochester City School District where she assumed several leadership positions that ultimately led to her role as the Deputy Superintendent of Teaching and Learning. Ms. Mascitti-Miller pursued her research in resource allocation practices in urban elementary schools under the guidance of her dissertation chairperson Dr. Marie Cianca, and committee member, Dr. Joellen Maples.
Abstract

Existing research indicates that improved student achievement in urban schools may be impacted by the strategic identification of school finances. Thus, the allocation of discretionary funds and the effectiveness of their use remains a critical element in school finance. This quantitative study examined practices that exist in the allocation of discretionary funds made by urban elementary principals. The study used a matched sampling methodology to provide an analysis of resource allocation in four schools in Good Standing and four schools not in Good Standing. The study found that principals in Good Standing primarily use their discretionary spending in the strategy Create Individual Attention as the primary means to create a high performing school. Further findings suggest that in order to create a highly individualized school environment, flexibility in spending provides principals with an opportunity to tailor the needs of their school more strategically. The findings offer principals, district administrators, and institutions of higher learning insights into the resource allocation practices of discretionary funds to create an individualized learning environment to improve student achievement particularly when enhanced by braiding school finance theories and practices.
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Chapter 1: Introduction

Introduction

Urban public schools in America are struggling to meet the academic and social needs of their students. High poverty, large achievement gaps, and low graduation rates are common statistics and demographics used to characterize urban school districts (Tough, 2008). Increasing attention on student performance has stakeholders seeking ways to develop an accountability system that holds all schools to the same standards. The expectation of equivalent achievement levels across all schools has forced districts to examine financial resources and their equitable distribution among schools (Miles & Roza, 2006). Despite years of research and evaluation of educational programs that support overcoming student learning problems, school and district level resource allocation continues to be a source of concern (Mitchell & Mitchell, 2003). As a result, school finance reform and allocation has emerged as a critical component for the transformation of public schools in the U.S. (Gloudemans, 2010).

In 2010, the first edition of a national report card on school funding was released. The report addressed issues of fair school funding that intend to ensure equal educational opportunity by providing adequate funding distributed to districts and schools (Obrien, 2012). Most recently in July 2012, the second school report card on school funding showed inconsistent grades in four interrelated areas of fairness: funding level, funding distribution, effort, and coverage.
Welner & Baker (2010) reported that since states have set ambitious goals for students, the push is on to link education spending to academic needs. Placing an emphasis on the connection between education spending and academic needs has developed in part due to the wide student performance variation within school districts, even though most schools within a district receive the same amount of funds. School funding has been generated primarily based on student enrollment and actual days students are present in school, known as Average Daily Attendance (ADA). Some schools receive additional categorical funds such as Title I funding for students who qualify for free and reduced lunch, but the decision as to how funds are allocated is generally made at the district level. Additionally, resource allocation at the school level may vary by school district and school building, including the degree to which a principal may have discretion over the allocation of school level funds (Goertz & Duffy, 2003). Understanding how resources are allocated for high performance at the school level is extremely important. Odden and Busch (1998) proposed that financial decisions made at the school site level are worthy of greater understanding and implementation. Their reports have substantiated the need to determine whether school leaders strategically allocate resources to best meet the needs of their students efficiently and effectively.

**Urban schools.** Overall, it is recognized that educating children in U.S. cities is extraordinarily challenging (Goertz & Steifel, 1988). Compared to non-urban districts, cities are home to large numbers of children who are poor, are first generation immigrants from non-English speaking countries, and are disproportionately from single parent homes. Their educational needs are urgent and critical. Therefore, understanding how to adequately fund programs for student improvement is essential.
Urban education and financial equity has been a critical national issue for years. Triggered by the Supreme Court’s decision in *Brown v. Board of Education* (1954) and the Civil Rights Act of 1964, the Elementary and Secondary Education Act (ESEA) was adopted into law in 1965. In an attempt to address the needs of struggling urban schools, President Lyndon B. Johnson launched the “War on Poverty” and ESEA emphasized the need for equal access to education and attempted to establish high standards, accountability, and equity for all schools (U.S. Department of Education, 2009). In the 1970s, the decision to equalize schools through property tax revenue began with the landmark decisions of *Serrano v. Priest* of 1971 and 1976 (Odden & Picus, 2008). Further legislation, including Proposition 13 in 1978, took additional steps to end disparities of unequal share of property tax revenue that resulted when districts received funds based on property values within district boundaries. The legislation attempted to provide adequate funding formulas to better meet the needs of all students, particularly those living in urban areas who continued to struggle to meet national learning standards based on state and national measures (NAEP, 2007).

A 1983 report called *A Nation at Risk* (National Commission on Education Excellence) blamed schooling for the general decline of society and implied that the problems in urban schools stemmed from lack of equity. The argument was made that money was not the solution for equity but excellence was. This movement turned into reform efforts for school improvement without necessarily supplying the funds to do so (Jennings et al., 2007). As a result, urban districts were faced with the challenge of how to reform schools to best meet the needs of their students in the face of growing accountability factors and declining funds.
In 1994, the Improving America’s Schools Act introduced the concept of holding schools accountable for student performance on state assessments and began to impose sanctions on those that did not. The number of schools failing to meet accountability measures increased and showed a widening of the achievement gaps between urban schools and non-urban schools. Urban education reform began to call for the elimination of the achievement gap, which was defined as “the gap between the quality of schooling that most middle-class kids get in America and the quality of schooling available for most poor and minority children – and the consequent disparity in result” (Wagner, 2010, p.9).

In 2002, Congress amended ESEA and reauthorized it as the No Child Left Behind Act (NCLB). Federal mandates outlined the Adequate Yearly Progress (AYP) required for accountability systems to ensure that all schools meet the needs of their students. NCLB required all states and schools to test students in grades 3 through 8 and report scores disaggregated by race, ethnicity, and other demographic characteristics associated with educational disadvantage (Thernstrom & Thernstrom, 2004). Data continued to provide evidence of the underachievement of students living in poverty, who were primarily attending urban public schools. As a result, closing the achievement gap became a key measure in describing the overall performance of urban public schools and further emphasized the debate of financial adequacy to meet the need of all students. The achievement gap has continued to be a driving force behind examining the issues of financial adequacy and distribution of resources to effectively fund schools and programs to best meet the needs of students (Odden & Picus, 2008).

More recently, the American Recovery and Reinvestment Act of 2009 (ARRA) was established as an economic stimulus bill. The bill channeled $100 billion into the
nation’s public education system based on the Race to the Top (RttT) program. The funds were intended to stabilize state and local education budgets as well as encourage reforms to improve student achievement. Kober and Stark (2011) found that efforts of ARRA were stifled due to limited state operating budgets, staffing issues, inconsistent responses, and implementation across states. Kober and Stark offered continued evidence that urban schools were faced with the challenges of meeting increased accountability measures while budgets were shrinking due to the reduction in state and local funds. This evidence offers compelling support to explore the existence of the resource allocation practices that meet the needs of students in order to support principals and policy makers in making strategic budgetary decisions.

**School finance.** Funding of public education is a complex process that varies by state, county, city, district, schools, and students. The inconsistency of practices is described by one of the most commonly used definitions of economics, which is “the study of allocation of scarce means to satisfy competing ends” (Becker, 1971, p.21). The term “scarce means” refers to the funds allocated to schools and “competing ends” refers to the varying costs needed to adequately meet the education needs of diverse student populations. School districts are faced with the task of allocating scarce resources to fund different and sometimes competing programs within the educational system. School district and school based administrators, primarily the school principal, must decide how to allocate resources to best serve their student population and their wide range of needs. Principals must consider issues of equity and adequacy in determining how to allocate scarce or limited resources at the school level.
Equity and adequacy are the two most prominent principles in school finance practices (Springer, Liu, & Guthrie, 2009). Odden and Picus (2008) define equity as “issues related to widely varying education expenditures per pupil across districts within a state…” (p. 1). Adequacy is best described as the relationship between the “use of funds and student achievement…” (Odden & Picus, 2008, p.1). School finance equity specifies that equally situated children should be treated equally. School finance adequacy, in contrast, prescribes that the level of educational resources made available be sufficient to provide all students opportunity to reach, at a minimum, a state-standard level of proficiency. Fundamentally, equity refers to fairness in the distribution of educational goods and services, while adequacy means that the allocation of resources should vary according to certain educational needs of students so schools can respond to those student’s needs (Springer, et.al, 2007).

While many argue that the funding of schools is important and that the American system of public education is one in which the amount of wealth in a school district shapes the quality of its schools (Kozol, 1991; Slavin, 1995), there have been differing opinions about how schools should be funded and what constitutes an equitable and adequate level of funding. Despite research that suggested that school funding levels and student achievement are largely unrelated (Hanushek, 1997), competing theory argued that how funds are allocated at the school level is more important to a school’s success than the amount (Carey, 2002). Therefore, it remains unclear whether education spending influences students’ achievement (Condron & Roscigno, 2003).

Analysis of resource distribution showed that approximately 80 percent of most school district budgets are allocated to schools for a range of student services including
instruction, school leadership support services, supplies, and materials (Odden & Archibald, 2001). The remaining funds typically are allocated to support services at the district level. Additional funds, when available, typically are dedicated to funding small class size initiatives and teacher pay increases (Picus & Fazal, 1995). According to Picus and Fazal, when additional program funds become available, the funds are used to support enhanced programs in technology, academic intervention improvements, and professional development. Regardless, the authority on how resources are allocated typically lies at the district or school level. A decision at the school level, also called site-based management, implies that building administrators have the discretion over how to allocate resources to best meet the needs of their students.

Recognizing that a substantial portion of a school budget may be allocated at the district level for fixed costs (Miller, Rosa, & Swartz, 2004), some school districts have allowed principals to have discretion over funds within their school funds. Discretionary budget funds may be used for things such as intervention programs, curriculum, staffing, professional development, and instructional materials (Hawley & Mills, 2008).

Acknowledging existing issues in finance, particularly in metropolitan environments with a disproportionate number of low income families, Hawley and Miles (2008) discussed the effective allocation of funds that support student success within urban schools. Based on their analysis in urban school settings, they found that the allocation of resources by building level leadership could be a key component to the success of a school. Hawley and Miles recommended three guiding resource strategies to use to create a high performing school. Their findings are the basis for the resource strategy framework (Miles & Frank, 2006), which identifies the following strategies for
determining how to allocate funds for the best results for students: (a) Focus Time on Core Academics, (b) Create Individual Attention, and (c) Invest in Teaching Quality (Miles, 2001). Hawley and Miles described a strategic school as one that has transformed the school environment through a strategic framework to address the multiple needs of students that meet or exceed expected student outcomes. As financial burdens, achievement gaps, and more rigorous accountability measures persist, further examination of this framework is needed to provide the knowledge principals need to make strategic budgetary decisions.

**Principal decision making.** Currently, urban elementary schools are faced with the demands of increased accountability measures and declining resources. In an era of accountability, schools, families, and policy makers seek school leaders who can make good, productive decisions in their schools (Brower & Balch, 2005). Recent research concluded that the impact a principal has on improving student achievement is critical (Darling-Hammond, 2008), and it is argued that good principals are the cornerstone to improving a school and student achievement through critical decision making skills (Tschannen-Moran & Gareis, 2004).

Marzano (2001) identified five statistically significant leadership responsibilities that positively correlate with student academic achievement. One of the responsibilities specifically addressed the effective allocation of resources to support academic needs of students. In addition, Reeves (2002) reported that a principal’s perception of his or her ability to make instructional and strategic funding decisions enhanced the ability to improve student achievement. The perspective recounted by Reeves supports the empowerment of principals to maintain authority over all aspects of their school.
Reeves’ research also specifically suggested that a school’s success may be impacted by building based leaders’ ability to make critical decisions in the allocation of resources based on expertise and knowledge of their students. Thus, a principal’s effectiveness and decision-making ability can affect student achievement (Mitchell, 1991). As a result, site based management and decision making over discretionary school funds has become increasingly important. Shifting the responsibility to the site based level has placed the onus on school principals to be knowledgeable about how to allocate resources to meet the needs of students. Thus, the principal requires the knowledge and understanding to make informed and strategic resource decisions. The allocation of resources at the site based level provides those closest to students with the ability to make the best decisions to meet the needs of their school community and therefore improve student achievement. Site based management of discretionary funds brings the perspectives of those closest to students to the decision making process. School level allocation of resources allows for the tailoring of programs to meet the unique needs of students and provides the flexibility needed to target resources appropriately. It is necessary to examine the knowledge and practices in making site based decisions to support the principals who are empowered to make these decisions. Assuming that best allocation practices exist in urban schools that report high levels of student performance, information regarding principals’ practices may give school leaders information to perform their role in budget decisions more adeptly.

Problem Statement

In the national drive to raise school achievement, urban school districts are posed with the greatest challenges of raising student achievement in English Language Arts and
mathematics (Resnick & Glennan, 2002). As a result, urban districts, which serve the vast majority of poor students across the country, face the task of eliminating or reducing the achievement gap that currently exists. In an effort to improve student achievement in urban schools, districts and researchers alike have sought ways to address this problem (Resnick & Glennan). Although gaining national momentum, a significantly unexplored and untested area of school effectiveness is the relationship between school spending, organization, and student achievement, as well as the relationship among them and its impact on academic performance. In a response to higher accountability measures, urban school budget discussions have often focused on the need for additional funding as though doing more of the same is the answer. In the current fiscal climate, it is becoming increasingly important to explore ways to use all funds available, regardless of the amount.

Urban schools have struggled to meet the needs of many of their students. As resources continue to decline, a principal’s ability to strategically use discretionary funds is paramount for improving school performance. It is critical, therefore, to understand and explore the reasons why urban principals allocate the funds under their control the way they do. In addition, it is also important to understand how they allocate the funds effectively (Hawley & Miles, 2008). As a result of this need, this study examines the decisions made by elementary school principals regarding their discretionary spending. The study analyzes the allocation of discretionary resources and determines what practices exist in these schools. The study further determines what differences exist in discretionary budgeting in schools that are meeting student performance expectations and in those that are not meeting student performance expectations. Results of the study will
support current and future principals and policy makers to better equip them to make resource allocation decisions for students in urban schools.

**Theoretical Rationale**

There is a need to study practices in resource allocation, as well as understand how resources interact and how practitioners can use financial strategies to improve performance. School finance research by Picus (2004), has provided qualitative and quantitative data, as well as considerations for administrators to allocate resources effectively. Additional school finance research by Miles and Frank (2008) offered information about the strategic allocation of resources and its importance in building an effective school environment. Differing from Picus and Odden, the work by Miles and Frank presented a more thorough exploration of high performing schools combined with the impact of school finance. As a result of the research by Miles and Frank, a coherent and concise theoretical framework for effective and strategic alignment of funds with the needs of a school was developed. Miles and Frank built a method to identify strategies for the effective alignment of resources to meet the needs of students called the resource strategy framework. The resource strategy framework is the theoretical framework that was used for this study because it was designed to provide guiding strategies for schools to use when identifying how to effectively distribute discretionary funds. Miles and Frank’s research of urban schools found that some successful schools have realized the ability to create a strategic and successful learning environment by reprioritizing and reorganizing their existing resources. Miles and Frank discovered that adding new resources to schools without understanding implications ignores evidence of the need to prioritize school goals and restructure resources to match them. Schools that spend
resources in key areas consistently create a school environment that meets rigorous state accountability measures.

The resource strategy framework is a theory of action that school leaders can apply when making decisions to use discretionary funds. According to Miles and Frank (2008), the resource strategy framework consists of three guiding strategies: (a) Focus Time on Core Academics, (b) Create Individual Attention, and (c) Invest in Teaching Quality. Focus Time on Core Academics includes the emphasis on core subjects and literacy through a variety of time schedules and instructional programs offered. Create Individual Attention and development of a personalized learning environment for all students can be found in the availability of effective assessments and data that will allow for adjustments in instruction. Invest in Teaching Quality can be identified through hiring, professional development, job structure and common planning time.

**Statement of Purpose**

Many research studies have explored the importance of specific inputs to improve student achievement such as teacher education level, teacher experience, and class size (Rivkin & Siggelkow, 2003). There is a growing demand, however, to understand how resources can be most effectively spent to meet the needs of students. The demand is particularly urgent in the case of urban districts and schools with scarce resources where there is pressure to meet the demands of rigorous accountability measures. After a review of factors that impact student achievement and the recent downturn in economic conditions, it is critical that resources are strategically aligned to meet the needs of students (Miles & Frank, 2008, Odden & Picus, 2008). Examination of effective
practices of resource allocation is warranted. The purpose to this study is to examine the
distribution of discretionary resources by elementary principals in urban schools.

As part of the momentum to allow those closest to students to have discretion
over a portion of funds, an additional purpose of the research described in this study is to
provide practical information for principals to use when deciding how to align resources
with the needs of their students. As urban school leaders face the daunting task to meet
the rigorous measures established by state and federal authorities, the need to reduce the
achievement gap is a must. Furthermore, the multiple roles a principal must play in a
school require the knowledge and understanding of many skills to be successful.

Abundant research exists on the role of the principal as a leader. However, current
understanding of the effective distribution of funds is limited (Miles & Frank, 2008).
Thus, the data collected in the proposed study offers an analysis of allocation practices by
urban school principals that can provide current and future school leaders with
information to make decisions that will best meet the needs of their students. Analysis of
the data and lessons learned from the research may also support the development of
professional learning opportunities for existing administrators, as well as for colleges and
universities who are offering coursework and programs for new administrators.

Research Questions

The purpose to this study is to examine the distribution of discretionary resources
by elementary principals in urban schools to identify what practices exist among high
performing schools. The purpose of this study is also to obtain a greater understanding of
practices that exist in the allocation of resources within the purview of principals to
provide the field with considerations when making strategic resource decisions. The research is framed by three questions:

Question one: How do elementary school principals in an urban school district spend their discretionary funds?

Question two: What are the budget practices of elementary principals in the allocation of discretionary funds in schools that have met Adequate Yearly Progress two consecutive years (Good Standing)?

Question three: What similarities or differences exist in the discretionary spending between principals of urban elementary schools that are in Good Standing and urban elementary schools that are not?

Significance of the Study

Urban schools across the country are facing an educational crisis based on current performance data. In recent years, reform efforts have been researched to offer meaningful insight into decision-making at the policy level. Increasing local and national attention on accountability has districts, states, and national level stakeholders searching for ways to develop an accountability system that holds all schools to the same standards. Research has continued to offer substantial information on a variety of strategies employed at the school level to improve student achievement (Odden & Picus, 2011). As urban school districts are considering reform efforts to support student achievement in schools, they are required to do so with fewer resources. As a result, policy makers are determining if effective financial resource allocation by a building principal is important to a school’s performance. The research in this study provides the field with information on what practices exist in the way resources are allocated by urban school principals. It
provides new principals, supervisors and central office administrators with additional information and practices to use in the strategic development and allocation of funds to best meet the needs of students.

**Summary**

Researchers have found that many school districts are consistent in the way they allocate resources (Miles & Darling-Hammond, 1997). However, the allocation of discretionary funds to schools and the effectiveness of their use (Picus & Fazal, 1995) remains a critical element in school finance for districts and schools across the nation. Specifically, there are persuasive reasons to explore the practices that exist in resource allocation by urban principals. Obtaining data on school performance and the principal’s role in making strategic financial decisions in urban schools is compelling. Research has focused on understanding how funds can be used to adequately support urban schools. Amidst efforts to improve urban elementary schools, decisions about resource allocation at the school level are ripe for discussion. Several researchers emphasized that improved student achievement in urban schools may be impacted by the strategic identification of school finances (Brock & Groth, 2003; DuFour, 2004; Marzano, 2001; Reeves, 2002; Resnick & Glennan, 2002).

The primary purpose of this study was to examine practices in the allocation of discretionary resources by principals in an urban school district’s elementary schools to determine whether practices exist among high performing schools. Research continues to offer substantial information on a variety of strategies employed at the school level to improve student achievement (Reeves, 2002). While urban school districts consider reform efforts to increase student achievement, they must find ways to do so with fewer
resources. As a result, policy makers need to determine whether effective financial resource allocation of discretionary funds at the school level is important to a school’s performance.

**Definition of Terms**

*Accountability:* Being held responsible and answerable for specified results or outcomes of an activity (over which one has authority). In education accountability is related to quantifiable measurable results in student achievement (NAEP, 2007).

*Achievement Gap:* The difference between how well low-income and minority children perform on standardized tests as compared with peers. For many years, low-income and minority children have been falling behind their white peers in terms of academic achievement (U.S. Department of Education, 2009).

*Create Individual Attention:* One of the three guiding strategies in the resource strategy framework that describes the expenditure of discretionary resources to create an individualized learning environment for students. For example, before and after school tutoring (Miles & Frank, 2006)

*Focus Time on Core Academics:* One of the three guiding strategies in the resource strategy framework that describes the expenditure of discretionary resources that focus on developing core academics in the classroom and school. For example, textbook purchases (Miles & Frank, 2006)

*Discretionary Funds:* Monies for which a person has the freedom to make a decision according to individual circumstances. In education this term is used to identify funding decisions that can be made at the building level by the building principal (Miles & Frank, 2008)
**Equity:** The fair distribution of educational resources for all students (Miles, Ware, & Roza, 2003)

**Good Standing:** Schools that have met Adequate Yearly Progress more than two years in a row based on the percent of students meeting a level proficiency as measured by mandated assessments and the expected percentage increases over time. (U.S. Department of Education, 2009).

**Invest in Teaching Quality:** One of the three guiding strategies in the resource strategy framework that describes the expenditure of discretionary resources that focus on developing teacher quality. For example, professional literature and teacher development conferences (Miles & Frank, 2006)

**Other Category:** Spending category that was created for this study to sort all other discretionary funds identified in the data that did not align to one of the three resource strategy framework strategies.

**Resource Allocation:** Decisions made regarding the assignment of budgetary resources in a strategic way to meet desired outcomes (Picus, 2004)

**Reform:** Recreating an educational system aligned and addressed to produce sustainable changes for all students to succeed (U.S. Department of Education, 2009)

**School/Site Based budgeting:** A decentralized system of providing appropriations for all aspects of the school program. For example, school staff can impact the final decision as to what areas of the school budget will be funded and for what amount (Sorenson & Goldsmith, 2006)
Chapter 2: Review of the Literature

There are compelling reasons to explore the practices of urban principals in resource allocation. Doing so gathers more data on student performance, budgetary issues and principals’ roles in making strategic decisions. This chapter focuses on pertinent information associated with practices in the expenditures of financial resources in schools, specifically in urban schools, as well as in school finance and principal decision-making. The chapter presents a literature review on urban schools and the existing challenges schools face to meet the academic needs of students, and an understanding of school finance including its history and practices. This chapter also provides a review of principal decision making regarding the allocation of resources.

Policy makers have been in the process of determining if effective financial resource allocation by a building principal is important to a school’s performance (Miles & Darling-Hammond, 1997). In an effort to better understand what practices in resource allocation exist among urban elementary school principals, the literature review begins with the history of urban schools, and the educational challenges they confront specifically related to accountability measures and budget factors. The literature review also examines aspects of school finance and the research regarding the strategic allocation of funds to improve student performance. The chapter concludes with a review of research on the role a principal plays in strategic allocation of discretionary funds and how funds are best used to meet the needs of all students in a school.
Urban Schools and Existing Challenges

As we move into the new millennium, education is at the forefront of the public agenda and Americans are looking to education as an investment in the future. More clearly defined learning standards and expectations are required for schools to be considered successful and, as a result, there is heightened attention on improving academic performance. Researchers and educators are interested in understanding the educational challenges that positively and negatively affect student achievement (Wiggan, 2008). While education has been viewed by many as an important mechanism for social mobility, Wagner (2010) argued that schools, particularly urban schools, reproduce rather than challenge social inequality. Over the past decade, policy makers have enacted multiple policies in an effort to ensure that all children receive high quality education specifically targeting urban schools (Spillane & Diamond, 2004). School leaders value the ability to more specifically target academic performance for students in high poverty areas and from different backgrounds in the quest to achieve college and career readiness. The job of teaching and the need for resources has changed over time (Miles & Frank, 2008).

Brock and Groth (2003) offered an illustration of the condition of urban schools in their longitudinal case study of low income and racial, ethnic, or language minority schools that provided insight to key factors that may contribute to effective urban school efforts. The study added to the considerable research on the characteristics of effective schools and their outcomes, and provided added attention to school decision making and resource allocations necessary to meet accountability measures. Theoretical background of the research asserted that characteristics of effective schools have been widely
supported in the literature and states that these schools have a common mission: an emphasis on learning, and a climate conducive to learning (Stoll & Fink, 1996). In spite of this, however, Stoll and Fink found that most urban schools were still unable to make the changes needed to develop effective schools. Consistent with these findings is the research by Tyack & Cuban (1995), which found no consistent evidence of dramatic changes in the educational system to improve student performance in urban settings. Conclusions from both research studies noted that schools that demonstrated higher student performance were distinctly different in the approach to instructional efforts due to the time and resources invested in building teacher capacity and growth.

According to the research by Roth, et al. (2003), based on a national sample of elementary schools, many school districts did not consider student performance outcomes for specific subgroups prior to the passage of the No Child Left Behind Act (NCLB) of 2001. With the passage of NCLB and the reauthorization of IDEA in 2004, districts were immediately held accountable for the academic achievement of all students. Regardless of federal guidelines for performance, increasing numbers of districts and schools were failing to make adequate progress. In addition, while there was no real accountability for achievement of all students in the past, districts were required to be measured on all subgroups of students. As a result, urban schools were at greater risk than ever for financial and curricular sanctions.

**Accountability and Student Performance**

In 2003, according to national exams administered by the National Assessment of Educational Progress (NAEP), 37% of fourth graders, 26% of eighth graders, and 26% of twelfth graders were reading below grade level (National Center for Education Statistics,
In stark contrast, statistics for students living in urban areas, only 36% of fourth grade students read at or above proficiency levels (National Center for Educational Statistics, 2003). There were no significant changes from 2009 to 2011 in the scores for lower-performing students from lower income families but scores were slightly higher overall in 2011 than in 1992. What continued to be consistent was a lack of significant change in the achievement gap between students from high poverty urban districts and their suburban peers. Such statistics have forced urban schools to reexamine their instructional strategies and alignment of resources to create a more targeted response to the standards-based reform movement (Miles, Ware, & Roza, 2003).

According to work by Hanushek (1994), over the past 40 years education funding has experienced growth. However, student performance in urban schools has not accompanied the increase of money in the education system. Ladd and Fisk (2009) stated that current resources are diminishing as accountability measures have become more rigorous, which has forced policy makers, building leaders and educators to show greater interest in examining whether funding and allocation of resources impacts student achievement. According to Meyer and Rowan (1978), the competing conceptions of the economic value of urban schooling suggest that conflict surrounding resource allocation decisions are governed by two distinct forces. One of the forces is the human endeavor, supporting the education of the entire child including the academic and social and emotional needs of students. The second competing conception of economic value is the productivity perspective, which focuses strictly on test score measures when making decisions about funding to educate a student. The findings concluded that both concepts
are critically important and the use of empirical evidence from both perspectives is needed to support effective policy financial decisions regarding school finance.

Hanushek (1989) described the effort to understand practices in resource allocation and the examination of the condition of urban schools using student performance data to help make informed and sound policy decisions. In order to do this, reliable student data is needed. Fortunately, the National Assessment of Educational Progress (NAEP) offers relevant information. Since 1969, the NAEP has administered assessments in various subjects including mathematics, science, reading and civics to a representative sample of 4th, 8th and 12th grade students across the country (U.S. Department of Education, 2000). Each student takes only a small subset of the assessment, which can cover a substantial amount of material. Test items include multiple-choice and written responses. In addition, students, teachers, and school administrators complete questionnaires that provide demographic data and instructional practices information. Overall findings concluded that school performance in urban settings is not isolated to economic conditions. The combination of educational strategies and clearly defined financial support for those strategies must exist to produce great results for students.

Research regarding performance in urban schools was obtained in a study completed by Reeves (2002). Reeves’ research recognized that while it is important to understand the most common poor condition of urban schools, it is equally important to have knowledge of successful urban schools in order to obtain information on what practices exist. The study, called “90/90/90”, focused on schools with the following characteristics: 90% or more of the students were eligible for free and reduced lunch,
90% or more of the students were members of ethnic minority groups, and 90% or more of the students met the district or state academic standards in reading or other area (Reeves, 2002).

Investigation of the 90/90/90 schools demonstrated multiple common characteristics among high performing schools, which included targeted instructional programs, strategic use of data and assessments, and resources devoted to developing a high quality teacher workforce. Further analysis concluded that effective teaching, combined with effective leadership practices, makes a difference in urban schools. Understanding the implications of this study assists in understanding how resources can be used most effectively to create higher performance in urban schools.

Research by Haberman (1991) found that the student perspective should be considered in an analysis of understandings and practices in urban schools. Research conducted by Wiggan (2008) investigated the school context and school processes that high achieving African American students from urban settings identify as contributors to their academic success. Wiggan’s qualitative research was specifically designed to explore the experiences of the African American students in urban school settings. Findings revealed major themes from the students’ narratives. The main areas students identified as factors impacting their performance included teacher practices and participation in extracurricular activities. Suggestions for improving student achievement included providing engaging pedagogy, individualized attention and opportunities, and allowing for extracurricular activities in schools. Wiggan’s research demonstrated that student perceptions can offer a greater understanding of how to improve schools and can
inform decision-making for school leaders including decisions regarding the strategic allocation of resources.

According to Condron and Roscigno (2003) it is not clear whether education spending influences students’ achievement. Analysis of resource distribution showed that most school districts allocate approximately 80 percent of their budgets to a range of student services including instruction, school leadership support services, supplies and materials (Odden & Archibald, 2001). The remaining funds typically are allocated to support services at the district level. Additional funds, when available, have typically been dedicated to funding small class size initiatives, and teacher pay increases (Picus & Fazal, 1995). Additional program funds that become available have supported enhanced programs in technology, academic intervention improvements and professional development. Continued research on the relationship of spending and student achievement persists in the research in school finance and budgeting.

Finances and Student Achievement

Responding to the gap between past and present structures to address higher goals and expectations, research has also examined the relationship between money and achievement (Murnane, 1991). The debate about whether the amount of funds makes a difference in student performance was most prevalent in the 1990s (Hanushek, 1996) and has shifted the thinking in the field of school finance. The debate exists regarding whether adequate resources are allocated to urban schools to meet the needs of disadvantaged student populations (Ladd & Yinger, 1998.)

Federal administration proposals have expanded support of local public education, particularly for urban schools that serve students from poor families (Temple, 1998).
Research has concluded that urban schools are in need of greater funding due in large part to the fact that students from urban areas tend to possess more risk factors and therefore are at greatest risk of school failure (U.S. Department of Education, 1996). Demographic and achievement differences between students who attend high-poverty urban schools and those who attend other urban, suburban, or rural public schools are significant (U.S. Department of Education, 1996). Schools that serve more students from low-income families are more likely to have lower student achievement and lower graduation rates than other schools, and urban schools have a greater number of students who live in poverty than other schools. Conversely, students from suburban schools enroll the lowest number of children from low-income families and have the highest average test scores and graduation rates (U.S. Department of Education, 1996).

Traditionally, federal spending for elementary and secondary education has been targeted to economically disadvantaged children. Of the money spent by the federal government, the two largest categories of spending have been in Title 1 and child nutrition programs (U.S. Department of Education, 1998). Title 1 of the Elementary and Secondary Education Act of 1965 provided funds to school districts based on percentage of students from low-income families, and the nutrition programs offered free or reduced-priced lunches and breakfasts to poor children through the United States. Special education is the third major category of federal spending. According to the research by Riddle (2004), federal involvement in elementary and secondary education has left implementation of programs to state and local level decision makers. Current economists argue, however, that the societal benefits of programs may arise from the provision of good education. Therefore, monitoring of such programs is needed. This is especially the
case in areas that include the early years, science and technology programs, extended school day opportunities, and teacher training.

The American system of public education is one in which the amount of wealth in a school district shapes the quality of its schools (Kozol, 1991; Slavin, 1999). Wealthier districts, primarily funded by local property taxes, have been able to spend up to three times as much per pupil than economically disadvantaged districts, leaving urban schools in peril of being unable to improve and sustain student achievement. At present, accountability measures have become more rigorous as resources are diminishing. Thus, policy makers, building leaders, and educators have begun to show interest in understanding if funding and allocation of resources impacts student achievement (Ladd & Fisk, 2009).

**School Finance and Funding Frameworks**

The challenges of creating an adequate financial system to meet the needs of all schools have changed the political and economic landscape (Ladd & Yinger, 1998). According to Rebell (2008), adequacy maintains that public education must make available sufficient resources to all students so that all students can reach a level of proficiency on state standards as measured by mandated assessments. In addition, while the issue of adequacy relating to school funding is of great importance, the examination of the spending and investment practices of these funds is equally important. This is at the heart of the debate of whether money matters and whether differences in how and when money is used affects the achievement of student outcomes (Jimenez-Castellanos, 2010).
Marion and Flanigan (2001) asserted that the study of school financing is impacted by influential theories of the time. According to Marion and Flanigan, three major theoretical perspectives have existed over the years: (a) Closed Systems Theory through the 1960s, (b) Open systems and Contingencies theory until 1975, and (c) Anti-positivism theory that continues to date. The Closed Systems theory was influenced by perspectives on organization and leadership, which asserted that external forces such as funding were not important factors in the efficacy of an organization (Mort, 1960). It was believed that the behaviors and structures that existed within the organization were the determining factors for success. The Open Systems and Contingency Theory, which began in the 1940s and 1950s and gained traction in the late 1960s, asserted that environmental factors have an impact on schools and outcomes (Coleman, 1986). The Anti-positivistic perspective argued that student outcomes are only somewhat determined by generalizable variables such as money or socioeconomic status, but more importantly may be related to individual patterns of achievement across students, schools and districts (Hanushek, 1989). Overall findings concluded that the theoretical philosophies that drive an organizational structure and behavior might influence outcomes and input variables such as funding. The focus shifted to the impact of socioeconomic status as a factor in student achievement outcomes, and the amount of school expenditures was a secondary factor in affecting education.

Work done by Odden and Archibald, (2001), discussed court decisions that have ruled in favor of districts and individuals regarding the lack of adequate funding in schools. Their findings asserted that court decisions typically directed financial decision makers to determine the cost of providing adequate education for students. School
finance adequacy has been addressed in some fashion in almost every state. This is due to school finance adequacy lawsuits combined with the enactment of the No Child Left Behind (2002). As education budgets have been impacted by a struggling economy and falling property values across the United States, expectations for improved student performance, better teachers, and the need to close the achievement gap have been rising (Odden & Picus, 2011). The growing movement to focus on school finance adequacy has impacted the effective determination and equitable distribution of funds among and within school districts. According to the research by Picus (2004), the impact of establishing financial adequacy has serious implications for financial decision makers in their ability to make strategic and meaningful decisions for schools.

In order to determine adequate level of school funding and in response to multiple legal cases, several models of distributing resources have been employed across the country. As a result of multiple litigations, courts have ruled that over 25 states have not used a financing system that provides for adequately funded education (Gordon & Rebell, 2007). While legal cases have influenced state and local education agencies to fund schools adequately, there are other contributing factors (Chambers & Parrish, 1982). The standards based movement, which started in the 1990s and continues today, required that states and districts examine how they can effectively and efficiently determine how to allocate resources to ensure that students receive an adequate education.

**School Finance and Spending Models**

**Resource Cost Model.** Based on their research, Chambers and Parrish (1982) developed a theoretical framework to adequately fund districts and schools. This framework was called the Resource Cost Model (RCM). The model was based on the
construction of an interdisciplinary team tasked to develop an appropriate service
delivery system. The model evolved into what is known today as the “professional
judgment model”. The professional judgment model was used in the field as a way for
districts to draw on the expertise of others to create a plan for their districts. The research
also contributed to the development of a second type of costing out model, which was the
successful school district method. The costing out model referred to an allocation
framework used by districts demonstrating financial success. In Ohio, the Supreme Court
ordered the use of this model as a method to determine the adequacy of the State’s
educational funding model (Rebell, 2008). This decision required that districts identified
as successful and meeting state academic standards provide a model of funding. Two
other costing out methods, including the “expert judgment” that calls upon professional
judgment of financial experts, and the “cost function model” which uses complex
econometric methods from private industry, have also been designed and used to
determine adequacy in school systems and districts. Overall findings from the research,
however, indicated that the Resource Cost Model does not address the allocation of
resources within school sites and therefore requires further examination.

Evidence-Based Model. Research by Odden & Picus, (2008) examined one
approach to school funding that begins at the school based level, which is known across
the county as the Evidence-Based Model. This approach identifies a set of factors that
are required to provide a high quality school. The Evidence-Based Model, also referred
to as the expert judgment model, provides an approach to resource allocation at the
school site. Findings concluded that regardless of the funding model used, further
examination of data and resource allocation practices at the school level is necessary to determine what practices matter most (Gordon & Rebell, 2007).

**Anti-positivism perspective.** Research by Hedges (1994), described the Anti-positivism perspective which entered the organizational theory literature beginning in the early 1970s. The research into the allocation of discretionary funds by school principals is consistent with the direction of anti-positivistic scholarship. Hedges (1994) argued that the organizational size and environmental stability of a school can’t be generalized to all schools’ resource allocation practices. Hedges’ work formed the basis for the “Strategic Choice Theory” (Child, 1972), which led to the genesis of the Anti-Positivism Theory in the 1980s and 1990s. In the spirit of strategic choice, research found that student outcomes were only partially determined by general variables such as money or socioeconomic status (SES). Research began to demonstrate the importance of significant individuality associated with achievement across schools and districts (Hanushek, 1996). Anti-positivist theorists began to assert that human events and decision-making impact organizations. This became known as the voluntaristic factor. As a result of this scholarship, Hanushek argued that the effect of resource allocation should be assessed within the context of voluntaristic decisions about those expenditures. The anti-positive position has been expanding its influence over the research in school finance, increasing the study of the impact of individual influences and decision making in the context of a school and its desired outcomes.

Further research findings from Hanushek (1996) suggested that a link between student achievement and the level of spending does not exist, but that schools need to spend the resources they have more effectively if they are to improve student learning.
Hanushek concluded that no evidence in their studies of urban schools substantiated that additional resources in a school could be directly connected to student outcomes. In contrast, Hedges, Laine and Greenwald (1994) argued that more money does relate to higher levels of student achievement. Their research presented that adequacy across systems is necessary, and therefore additional funds may be necessary in the event some schools have a higher population of students with disabilities, or require additional learning in their primary language if other than English.

The contrasting research by Hedges et al. (1994) and Hanushek (1996) is of importance as their findings presented compelling arguments over the controversy regarding issues of resource allocation in schools. As the controversy persists, research by Picus (2000), stressed that further understanding of school finance and the allocation of resources needs to address several issues: (a) where spending levels are adequate to meet the needs of students, (b) how educational resource are allocated and used, and (c) how funding levels are aligned to student outcomes.

**Vouchers.** The work by Lipman (2008) included in the debate the issue of public school vouchers as a strategy to successfully allocate funds to districts and schools. Lipman described the role of the courts as they have directed consultants and policy makers to analyze the use of public school vouchers that allow low-income students to choose public schools in other districts. While conservative legislators often oppose increased funding, they advocated for school choice and market-based accountability or competition. Kenny (2010) asserted that since most legislators represent non-urban constituents who advocate for competition in the marketplace, vouchers posed a dilemma because such programs could allocate significant funds to urban schools. Conservatives
nevertheless began to embrace vouchers, designed to be equal for all students, as a way to force public schools to meet the same expectations as private schools which would increase public school enrollment. After reviewing all aspects of the voucher option, they concluded that suburban public schools may benefit. Determining the costs of educational services and highlighting the substantial cost of providing urban education was less compelling than the opportunity for suburban schools to use vouchers for their competitive advantage to support public education. A need for further understanding of the debate of vouchers and fiscal equity persists (Gordon & Rebell, 2007). While the voucher made advances in providing adequacy in schools resources, it has not addressed the challenges of funding individual students due to the nature of the design. For example, Gordon and Rebell indicated that vouchers have not adequately differentiated financial support based on individualized student needs, such as adequate resources for a student with a disability or a student living in a large urban district.

**Divergence between revenues and expenditures.** Additional research by Ladd and Yinger (1998) on the issues of school finance concluded that high poverty urban school districts have problems because they often have a divergence between the amount of tax revenues that can be raised and the expenditures that are required to develop an acceptable achievement level. Assuming that the needs of students in many urban schools may be vast and costly, issues of financial requirements and equity are critical to successfully addressing the needs of all students. Conclusions from their findings have continued to spur the conflict between financial equity among urban school districts and their suburban counterparts. In supporting research, the cost differential between large city schools districts and others districts showed that large city schools spent
approximately twice as much as the average school to achieve similar student
achievement outcomes (Duncombe & Yinger, 1997). The cost differentials are due in
large part to the fact that a relatively high percentage of big city students are poor, come
from single family households, and have limited English proficiency, therefore, requiring
different education programs and models. It may be that differences in urban versus non-
urban achievement are due to the existing state aid formulas that do not fully account for
the differences in urban costs or revenue-raising capabilities.

Equitable allocation of funds. Further understanding of the balance for financial
equity was developed by Ladd and Yinger (1998) through an analysis of schools in the
Netherlands and the practices that exist to achieve resource adequacy. Quantitative and
qualitative data were gathered from schools serving a high population of economically
disadvantaged students and a high immigrant population. Methodology for distribution
of funds revealed three essential objectives: (a) money follows students on a per student
basis, (b) per pupil amount varies based on the educational needs of each child, and (c)
schools have the flexibility to allocate the money as they deem necessary. Overall, the
data could not accurately substantiate that other factors, including quality of the teachers
and leaders and the profile of the students served, could be attributed to school success
more than equitable distribution of resources. The study also concluded, however, that
additional resources based on student need could be helpful to a school, but that it could
not in isolation be the sole reason for a school’s success. These findings add to the
compelling interest to further understand the practices and the need to adequately fund
and allocate available resources.
In the United States, Willis and Hill (2011) found a similar attempt to allocate funds to schools in what was to be considered a more equitable approach. This approach was not a voucher but was an approach allocating dollars to each school based on the needs of the students. This approach to budgeting, known by different names including student-based budgeting, weighted student funding, and fair student funding, distributes dollars to schools based on student needs instead of staff positions. This approach was designed to ultimately allow dollars to be distributed more equitably and allow for more decision making at the building level (Willis & Hill, 2011). Research concluded that although site based leaders and teams found this approach more empowering, results in student performance were not evident.

**Student based funding.** Miles and Roza (2005) found as the attention shifted in school reform initiatives toward how districts allocate resources to schools, student based funding emerged as one alternative to the traditional central allocation processes. Student based funding is based, in theory, on greater equity of resources among schools and resource allocation decision making to those closest to students. Student based funding is embedded in the premise that empowering principals with the ability to make key decisions improves student achievement and builds greater accountability and investment in their work. As stated by the superintendent in the Baltimore City Public Schools, school based funding “is not about budgets. It is about equity, freedom and accountability” (Peterkin, et al, 2011, p. 125).

In a case study comparing two school districts, Chambers et al. (2008) discussed the reform efforts involving weighted student funding. The study, funded by the American Institutes for Research, included the San Francisco School District and
Oakland Unified District. The study was generated due to limited literature on the implementation and possible impacts of this type of budgeting methodology. The study used a mixed methods approach. Collecting and examining quantitative and qualitative data from both district and school level staff revealed mixed results. Overall, quantitative and qualitative results indicated that weighted student funding provided a greater equity of funds and school autonomy. The researchers found that weighted student funding cannot be a reform for change, but a process by which other reform efforts can occur. The study concluded, based on the qualitative data, that weighted student funding allows schools to move away from a compliance mentality to one of innovation with greater equity and autonomy of funds, but cannot be correlated to any increase in student achievement. Therefore, modifications should be made to support the continuation of this finance approach. Suggested modifications included the equity in the distribution of resources from school to school, the education of the principal on school finance, and the communication between the central division and school based leaders.

**Challenges of measuring cost effectiveness.** According to Picus (2000), holding schools more accountable for the performance of their students became one of the staples of education policy in the 1990s and persists in present day. The educational literature, however, continues to have less research on a school’s cost effectiveness due to the difficulty in measuring education outcomes consistently across children (Levin, 2009). Supported by the examination of resource allocation by Levin, the limitations of doing a cost benefit analysis are due to the fact that an investigation relies on various tests and measures of gains that are inconsistent across schools and districts. The research concluded that policy makers must continue to explore efforts for school improvement.
that include finance reform. Current trends include support for more site-based management, school choice, vouchers and charter schools that offer more control over resource allocation. Further analysis of site based decision-making and its impact on student performance is an area for additional research as accountability measures rise and funds decrease.

**Practices in Resource Allocation**

As resources decline, schools continue to grapple with greater accountability measures and the challenge of improving student achievement. For that reason, it is essential to understand how to spend funds strategically (Odden & Picus, 2011). Odden & Picus’s research has provided insight into trends that are designed to improve a school’s performance including vouchers and charter schools that offer increased choice in school selection. Noting that this is not the answer to creating a high performing school, others have contended that increased funding may be a solution (Picus, Odden, Potela, et al., 2008).

According to the work by Hanushek (1996), while few would argue that the funding of our nation’s public schools is not important, there are many opposing views related to how schools should be funded and what constitutes an equitable and adequate level of funding. Hanushek stated that research from the 1980s and 1990s suggested that school funding and achievement are largely unrelated. More information has contradicted this claim and therefore has created a need to further examine how resources can be effectively utilized. Hanushek provided historical analysis of the decisions regarding how resource allocation decisions are made to improve learning either at the district or building level. District decisions are described as a central office
administration making the majority of the resource decisions rather than at the building level, which has very little to no discretionary funds. Site based management implies that school-site administrators are able to make decisions regarding instructional strategies and curriculum and intervention programs for struggling learners. In most cases it was found that few large urban school districts utilized school based budgeting as a strategy for effective allocation of resources with the exception of some categorical funding such as Title I (Goetz & Duffy, 1998).

Goertz and Stiefl (1988) argued that in districts where there are sixty or more schools, effective management strategies are more difficult than in a district with fewer than ten schools. They suggested that because of the enormity of the task in urban areas, an understanding of school site based management is important. Furthermore, their study of four city schools offered an understanding of site based management of school resources and how that management was implemented. They found that issues of equity, participation, power, and accountability are factors to be considered when evaluating the allocation of resources at district and school levels. Goertz and Stiefl (1998) stressed that most urban city school districts have more students and more schools than districts located elsewhere. Most urban school districts possess a high concentration of students from poverty, immigrant students who are from non-English speaking families, and single parent homes, which are often factors in the struggle to meet the diverse needs of students. All of these factors make the search for effective education strategies in urban areas imperative and complex. In urban districts where the diversity of needs is wide, it is unlikely that one path to academic success will meet the needs of all students.
Research findings from Jimenez-Castellanos (2010) showed that schools where educational resources positively correlated to higher student achievement included allocations related to higher teacher salaries and newer, more stationary facilities. Further analysis indicated that a higher amount of budget percentages spent on higher teacher salaries attributed to higher student performance. Jimenez-Castellanos concluded, therefore, that the salaries of teachers should be considered a valuable component in adjusting budgets to hire the most qualified teacher work force. In addition, he noted the relationship between the school facility, including the care of the building and its physical surroundings, correlated to student performance. Implied in this finding was that the value of the environment indicated greater respect for students and their families.

Implications of the research by Odden and Picus (2008) demonstrated that improved school performance can occur when funding is constrained if resources are allocated to and aligned with a strong mission and vision in a school. Odden (2009) found four strategies to use in the effective distribution of allocation practices. The strategies for consideration in making effective resources decisions were (a) resist the cost pressures on schools, (b) develop a more powerful school vision, (c) identify the necessary resources to meet the new school vision, and (d) reallocate resources to meet the new vision.

Odden and Picus (2008) concluded that schools with inadequate resources can use five macro-strategies for allocating restricted dollars: (a) use staff feedback as a general guideline and reallocate staff to these suggestions, (b) remain flexible about class size, (c) create common planning time for teachers to engage in collaborative work and planning,
(d) provide the resources such as instructional coaches to help teachers and students, and
(e) if funds remain inadequate reduce other programs using data on their effectiveness.

Overall conclusions indicated that schools should engage in some instructional revisions
and strategic allocation of resources if they are to use limited funds to meet the needs of
students.

Further research was conducted by Miles and Frank (2008) regarding schools
with constrained budgets and resource allocation. Case studies were conducted on high
performing schools, interchangeably called strategic schools, to examine what practices
existed in the way people, time, and money were used. Findings indicated effective
resource allocation practices in schools correlated with transformational student
achievement. Accordingly, the practices identified were organized into three areas called
the Big Three. Using a resource strategy framework, Miles and Frank organized financial
data into three guiding strategies: (a) Focus Time on Core Academics, b) Create
Individual Attention, and (c) Invest in Teaching Quality.

The research completed by Miles and Frank (2008) provided an understanding of
how school leaders and administrators can allocate resources to create an effective school
environment. Additionally, the researchers suggested that high performing schools have
several commonalities in their structures and systems that help create an environment that
works for most students. Analysis of the data concluded that as policy makers seek ways
to improve student achievement, looking to ease restrictions on how to organize funds is
becoming more prevalent in districts and schools.

Further analysis of the alignment of resources concluded that three guiding
strategies exist which support student success (Miles & Frank, 2008). The first guiding
strategy, Focus Time on Core Academics, was apparent when practices that support core academics and literacy include extended learning blocks in the daily schedule (Rowan, Fang-Shen, & Miller, 1997) and the offering of a variety of programs that ensure students meet rigorous academic learning standards. Evidence of the second guiding strategy, Create Individual Attention, included creating individual student attention, effective use of data, creating opportunities for small group and individualized instruction, and developing structures for personal relationships between student and teachers. The third guiding strategy, Invest in Teaching Quality, was characterized by allocating resources for hiring, professional development, job structure, and common planning time in the development and retention of highly effective teachers (Cohen & Hill, 2000). Evidence of this practice included job-embedded teachers’ common planning time, organizing and assigning staff to fit school needs in order to provide expert support for core instructional design, and compensation and career ladder opportunities. Concluding evidence found by Miles and Frank indicated that high performing schools established a robust school plan that aligned with the identified strategies paired with the strategic allocation of available resources. These actions have implications for the school principal. As the budget leader, a principal may choose to take all three guiding strategies into consideration when deciding on how to spend the school funds within his or her discretion.

Principal Decision Making

According to Miles and Darling-Hammond (1997), the expectations of what schools look like and how they are organized are changing, as high performing schools are finding creative ways to rethink school resources. A primary theory of school based
funding is to provide school administrators with greater autonomy to determine the allocation of their resources distributed to schools based on the needs of the students they serve. The underlying premise holds that entrusting principals with authority will result in an attitudinal shift in how principals envision their roles and influence as leaders. School based funding is also founded on the premise that additional discretion over funds would give decision-making authority to principals to encourage differentiated instruction that would ultimately influence student achievement. Since 1994, educational researchers and policy makers have increasingly focused on the degree of organizational control over schools. (Ingersoll, 1994). Site based decision making was contrary to past practices and research that supported more traditional bureaucratization of district level control of schools (Ladd & Hansen, 1999).

Fullan’s (2001) research focused on operational and structural changes in education. However, due to increased accountability the focus has turned to the leaders in charge of making the system work. Based on the literature, it is apparent that the role of the principal in making crucial decisions is significant, and the traits a school leader possesses has an effect on the decision making skills needed (Marzano & Waters, 2009). A set of standards was developed to outline important characteristics a school leader should possess to be successful.

The research by Skrla, et al. (2001) connected the domains and the current Interstate School Leaders Licensure Consortium (ISLLC) standards for school leaders. The National Policy Board for Educational Administration (NPBEA) developed the first nationally recognized set of competencies for school leaders (Skrla et al., 2001). The 21 Performance Domains were identified to support the preparation and professional
development for school leaders. Common leadership elements surfaced including curriculum, decision-making, community and parent involvement, and appropriate allocation of resources. One critical aspect the research identified was the need for principals to channel resources in ways that support the accomplishment of a school’s mission and vision. Effective allocation was strategic if it allowed for additional professional development, more time on task, and the resources and materials needed for teachers to be effective. Also infused in these domains was the flexibility and support needed for principals to accomplish such goals.

The research conducted by Marzano (2001) identified five statistically significant district level leadership responsibilities that positively correlated with student academic achievement: (a), ensuring collaborative goal setting, (b) establishing nonnegotiable goals for achievement and instruction, (c) creating board alignment with and support of district goals, (d) monitoring achievement and instruction goals, and (e) allocating resources to support the goals for achievement and instruction. Specifically identifying the allocation of resources to support student achievement is significant to this study.

Moreover, according to Reeves (2002), principals’ perceptions of their ability to make instructional and strategic funding decisions have hindered their ability to improve student achievement. Reeves’ research suggested that the success of urban school reform initiatives may be impacted by building based leadership’s ability to make critical decisions. Building level decision making is of particular significance in the allocation of resources if leaders are able to make strategic decisions derived from their expertise and knowledge of the students they serve. Following Reeves’ work, it has been concluded
that principal effectiveness and decision making ability can affect the performance of student achievement on standardized state measures.

According to Shields and Miles (2008) a significant role of a school principal is to be the steward of the financial resources in a school budget. In research by Gardner, et al. (2005), decisions regarding equitable and strategic distribution of funds were grounded in the theory that leaders who have a clear sense of who they are and what they stand for have a strong anchor for their decisions and actions. The authors stated that these traits are used to describe authentic leadership. Authentic leadership has been emerging in the social science literature as a result of a widespread need for ethical and effective leadership (Fry & Whittington, 2005; Luthans & Avolio, 2003). Authentic leadership is defined as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate to foster self-awareness” (Walumbwa et al., 2008, p. 90). Findings from the research by Fry and Whittington (2005) identify the components that are the basis of authentic leadership which include self-awareness, internalized moral perspective, balanced processing, and relational. The theory of authentic leadership is helpful in understanding and providing insight into effective principal decision making particularly in the areas of resource allocation.

Fullan (2001) discussed the role of the leader in changing the culture of both business and education. Recognized as having similar large-scale transformations, businesses and schools must become effective learning organizations, leaders must cultivate and sustain learning under complex and changing conditions if the organization is to be successful. Fullan outlined five core competencies, called The Framework for Leadership, for leaders to use as a guide for dealing with complex changes and making
effective strategic decisions. The Framework for Leadership competencies include (a) moral purpose, (b) understanding change, (c) relationship building, (d) knowledge creation and sharing, and (e) coherence making. Two fundamental levels of leadership emerged from this framework that identified practices as a manager and the internal commitment that comes from the leader. Fullan’s study suggested that, in order for a leader to be an effective manager, he or she must understand and allocate resources to strategically meet the needs of student population.

The role of the school leader in school improvement was further described in the research by Wohlstetter et al. (2008). Results from this study demonstrated that the principal-agent theory provides a framework for understating how data driven decision making supports effective schools and that site based administrators want the flexibility in budgeting, scheduling hiring, and developing school plans that provide autonomy. Additionally, a district using school-level leaders as the change agent provided principals with greater authority regarding school level policy-making decisions. The study concluded that shared objectives between district level and building level leadership were most effective in building student achievement. The research supported an approach that can guide policy-makers’ choices about the responsibility between the system and its schools, who should be responsible for which decisions, and how to use the data to determine planned organizations (Earl and Katz, 2010).

Additional research by Graezewski (2009) illustrated how the traditional administrative role has expanded beyond the role of an instructional leader. Analysis of a district wide reform effort and the practice of site based instructional leadership was conducted using surveys and interviews in schools in the San Diego City School District.
The findings indicated that the role of the principal as an instructional leader and site-based decision-maker led to positive teacher perceptions and improved focus on instruction. Continued research efforts focused on the role of the principal and the principals’ perceptions of their impact on accountability (Lyons & Algozzine, 2006). The findings concluded that increasing pressure on school leaders to produce gains in student performance increased the need for principal autonomy in decision-making regarding areas of curriculum design, resource allocation, and professional development.

In 2009, Marzano and Waters, completed a meta-analysis of the effects of district leadership on student achievement using studies conducted between 1970 and 2005. The studies showed a correlation between district and building level leadership and standardized measures of student achievement. The meta-analysis identified five district level leadership responsibilities or initiatives with a statistically significant correlation with average student academic achievement. The significance of the findings was the identification of the ability to allocate resources to support the goals for achievement and instruction (Marzano & Waters, 2009).

As school leaders become more aware of the need to adequately allocate resources within their discretion, increased understanding of what practices exist in the technical competence of the budgetary process is necessary. In general, school leaders acquire technical competence in relation to the budgetary process through formal education or training, but more often than not competence comes from on the job experiences (Yukl, 2001). While certain natural talents or characteristics may provide some individuals with advantages as a leader, most school level leaders have limited knowledge about finance and budgeting.
According to Sorenson and Goldsmith (2006), two important types of strategic financial leadership are needed as accountability measures become more rigorous and resources continue to decline: (a) clear establishment and communication of the parameters and the criteria for budget reductions, and (b) a clear plan for continued and future investment in education priorities. Clear focus on budget priorities and thoughtful decision-making creates a plan that is sustainable over multiple years and leads to effective student achievement.

Brower and Balch (2005) found that school leaders are asked on a daily basis to make decisions that are in the best interest of their school or institution using transformational decision-making. Transformational decision-making was defined as “thinking and acting in ways that reflect the common good as the leadership imperative, not the individual good” (p.3). Their research focused on the impact of using transformational decision-making in schools to make the most positive impact as a building principal. A priority for understanding transformational leadership in schools is the guiding consideration of what is in the best interest of students, staff, board members, administrators, and parents. Transformational decision-making pedagogy can be considered as practices that guide thoughtful and effective decision-making in school leaders, particularly when making strategic funding decisions. The underlying theory is that school leaders should strive to ensure school success and use sound pedagogical practices to make clear and thoughtful decisions on behalf of their school community. This notion is important when understanding how resources are distributed by leaders when site based funding is available.
Summary

As discussed in this chapter, the research substantiated the importance of understanding practices in resource allocation to meet the academic needs of students in urban districts and schools. As accountability measures increase and funds decline, scholars agreed that it is imperative to understand how decisions are made in the strategic allocation of resources to improve school effectiveness. In order to study the effective practices in allocation of resources by urban school principals, the chapter first reviewed the literature on the existing challenges urban schools contend with to meet the academic needs of their students. The challenges have led to the changing role of school leaders and the greater focus on the understanding of strategic resource distribution.

This chapter also discussed the heightened national attention on improving academic student performance in urban schools and the need to understand the educational challenges that positively and negatively affect student achievement. Urban schools, particularly, are seeking the most effective ways in which to improve student achievement. The chapter reviewed the rigorous legislative accountability measures schools are required to meet which have had a significant negative impact on urban schools. The research review also included finance strategies used to improve school performance.

Over the past decade, as accountability measures have become more rigorous, educational funding for urban schools has declined. Researchers stated, therefore, that an understanding of the current financial issues facing urban schools includes the examination of effective resource allocation. Scholarly research included in this chapter offered an understanding of school finance and its potential impact on student
achievement. Varying opinions on the impact funding has on student achievement existed and were discussed.

An additional section of the chapter included the research on school finance and funding frameworks. The review discussed the political and economic landscape that has led to the development of spending models to address the equitable allocation of resources to urban districts and schools. Further analysis of the literature included an examination of the equitable distribution of resource practices for consideration in districts and schools. A variety of theories and approaches to achieve equity was examined.

Specific analysis of the spending structures led to the selection of the resource strategy framework by Miles and Frank (2008) as the model for this research project. The framework offered a coherent approach to use as a basis to analyze allocation practices made by district and school leaders to meet the required accountability measures. Exploring the use of the framework led to studies regarding the role of the school principals and their ability to make strategic resource decisions. Scholars agreed that the role of the principal is critical to a school’s success and offered insights to principal decision making and their ability to make effective student centered financial decisions.

In conclusion, this chapter reviewed research on urban schools, school finance and practices, and principal decisions in the allocation of financial resources. Overall, school finance research currently centers on determining the amount and allocation of money needed to provide an adequate education. Additionally, increased accountability
focuses attention on the role of the principal and his or her part in making successful school resource allocation decisions for all students’ success.

The next chapter discusses the methodology used for this research to explore what practices exist in the allocation of resources by urban elementary school principals to meet the needs of their students. A detailed explanation of the execution of this research project is outlined and described.
Chapter 3: Research Design Methodology

The purpose of this chapter is to identify and describe the methodology used to conduct the quantitative study. The study used a matched sampling method to examine practices in discretionary school funding decisions made by urban elementary school principals. Chapter three provides an explanation of the methodology used in this quantitative study and includes a description of the research context, study participants, data collection instruments and procedures, and the process for data analysis of school financial data over which principals have discretion in urban elementary schools. It concludes with a summary of the methodologies discussed.

The data on urban school student performance and budgetary issues offered compelling reasons to explore practices in resource allocation to best meet the needs of students (Picus, 2004). The investigation of the adequate allocation of resources to meet the needs of students raises questions about the ability of site based leadership to make appropriate decisions over discretionary funds or funds within their control (Chambers, et al., 2008). Educators have long argued that improvements in schools and student performance cost more. However, statistical links between spending levels and student outcomes continue to be debated (Rebell, 2008). The purpose of this study is to examine the distribution of discretionary resources by elementary principals in urban schools to identify what practices exist among high performing schools. The research questions answered in this study were the following:
Question one: How do elementary school principals in an urban school district spend their discretionary funds?

Question two: What are the budget practices of elementary principals in the allocation of discretionary funds in schools that are in Good Standing by state accountability measures?

Question three: What similarities or differences exist in the discretionary spending between principals of urban elementary schools that are in Good Standing and urban elementary schools that are not?

Research Context

The research study occurred in a large urban school district in upstate New York. The urban district chosen for this study possessed the characteristics that often describe urban schools including high poverty, large achievement gaps, and low graduation rates (Tough, 2008). The Central City School District (CCSD) chosen for this study was located in upstate New York and served approximately 32,000 students in 62 schools including 39 elementary and 23 high schools. According to the 2010 Basic Education Data System (B ED S) district report, the student population was comprised of 64% African American, 22% Hispanic, 10% White, and 3% other. Approximately 85% were eligible for free or reduced lunch. In addition, 17.6% were classified as Students with Disabilities, and 10% were English Language Learners, which includes Spanish speaking bilingual students and students from foreign countries.

Research Participants

Potential schools for inclusion in the study were selected from a list of all elementary schools in the CCSD. The participants were specifically selected by
obtaining appropriate schools for a matched sampling method. The selection was narrowed to four schools that were in good standing and four that were in a variety of levels of accountability status requiring intervention for improvement by state regulation. For selection purposes, schools in the study were identified by first analyzing the performance data of each school based on student achievement and state accountability status. Included in the selection process were additional factors to make a viable match in which to analyze the resource allocation decisions made in each school. The selection of the eight urban elementary schools within the CCSD was based on several factors that created a more accurate matched sample for the study beyond student performance data. Data used to guide school selection included the size of student enrollment, ethnicity distribution, proportion of Students with Disabilities and English Language Learners, and the number of students tested grades 3-6.

The analysis of school accountability status determined that, of the 39 schools, 8 elementary schools in this district were potentially appropriate for the study. Student achievement data was gathered from the Department of Accountability as well as from State School Report Cards. Student performance was measured by the number of students who met learning standards on state assessments in English Language Arts and mathematics in grades 3-8. Further selection criteria of the schools included the number of students tested, the size of the subgroups that existed in each building, and the total size of the school. Table 3.1 provides the demographic information on each of the schools identified for inclusion in the study.
Table 3.1

Demographics of Schools Selected

<table>
<thead>
<tr>
<th>School</th>
<th>N</th>
<th>Sub Groups</th>
<th>Accountability Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B/AA</td>
<td>H/L</td>
</tr>
<tr>
<td>A1</td>
<td>232</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>A2</td>
<td>263</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>B1</td>
<td>414</td>
<td>108</td>
<td>53</td>
</tr>
<tr>
<td>B2</td>
<td>393</td>
<td>157</td>
<td>59</td>
</tr>
<tr>
<td>C1</td>
<td>266</td>
<td>138</td>
<td>8</td>
</tr>
<tr>
<td>C2</td>
<td>342</td>
<td>66</td>
<td>27</td>
</tr>
<tr>
<td>D1</td>
<td>228</td>
<td>103</td>
<td>20</td>
</tr>
<tr>
<td>D2</td>
<td>285</td>
<td>86</td>
<td>28</td>
</tr>
</tbody>
</table>

Note. B/AA = Black and African American; H/L = Hispanic or Latino; W = White. SwD = Students with Disabilities; LEP = Limited English Proficient; EconDis = Economically Disadvantaged

Table 3.2 provides the number of years the principal in each school has worked as a principal. This data provided additional insight into relationship between years of service and what practices were used in the allocation of discretionary funds.
Table 3. 2

Number of Years as Principal (Including 2009-2010 Academic Year)

<table>
<thead>
<tr>
<th>School</th>
<th>Total years as principal</th>
<th>Years at principal school</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>A2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>B1</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>B2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>C1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>C2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>D1</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>D2</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Instruments and Procedures Used in Data Collection

School selection data was gathered from the Office of Accountability and financial data for this study was gathered from the Office of Finance in the CCSD. Effective data collection practices, including the identification of sources and methods for data collection, requires a process (Fitzpatrick, Sanders, & Worthen, 2011), and instruments used in the research must be valid and reliable (Cottrell & Neugerg, 2005; Creswell, 2009). To understand how resources interact and the ways practitioners can most successfully use them to improve performance, the research explored how resources, people, time, and money work together.

For purposes of this study, in order to analyze resource expenditures made by principals in performing and under-performing schools, a common method of constructing equivalent groups and a matched sampling methodology was used.
(Rosenbaum & Rubin, 1985). Matched sampling was chosen because it is refined in its selection of controls, and effects can be estimated within a relatively small sample size. In addition, matched sampling allowed for the selection of groups to reach probable equivalency to make the best match possible.

In matched sampling, the following areas should be considered: algorithms, structures, and distance. In current statistical practice, algorithms are matched samples formed using “nearest available” matching variables. In common matching practice, structures are treated units matched to one control, called pair matching or 1-1 matching. Multivariate matching methods use several variables to construct probable equivalent groups on observable characteristics. The pairing can be done by matching a whole group or 1:1 matching pair-wise.

This study used a 1:1 matched grouping to select schools to compare decisions made in resource allocation in urban elementary schools. Schools were paired based on matching a school in Good Standing and to a comparable school not in Good Standing. The matched sampling methodology, however, has the limit of not finding a sufficient match for each subject thus; closest variable selections were made allowing for the best match of schools (Rosenbaum, 1989).

In addition, this study also examined the schools based on the whole group matching method to examine practices of principals’ decision making in schools in Good Standing and schools not in Good Standing.

**Procedures**

In order to complete the research, the following steps occurred:

1. Obtained the required written permission from the district.
2. Obtained the approval from the Institutional Review Board at St. John Fisher College.

3. Gathered information from Office of Accountability regarding all schools and New York State Report Cards to establish the schools as the participants for the study.

4. Selected eight schools to be paired based on accountability status and demographic variables. The identification process included eight schools, four schools in Good Standing and four schools identified in some level of accountability status based on state regulations for poor student performance (Table 3.1).

5. Obtained data on the allocation of funds from the central school district financial division, Office of Finance. Collect financial data for the 2009-2010 school year and detail actual expenditures in the discretionary funds available to principals.

6. Analyzed data on discretionary expenditures to distill funds used for non-instructional needs, for example custodial supplies.

7. Engaged in discussion with district budgetary analysts to clarify expenditures that would be appropriate for the categorization into the resource strategy framework as needed.

8. Tallied the total amount of each school’s discretionary funds so that the percentage of each expenditure could be calculated by per pupil expenditure.
9. Organized financial data into three guiding strategies using the resource
strategy framework (Miles & Frank, 2008): Focus Time on Core Academics,
Create Individual Attention and Invest in Teaching Quality (Miles, 2001).

10. Entered information into a database to analyze the comparisons between pairs
and groups relative to the distribution of resources for each school.

Data Analysis

According to Monacciani (2010), research evaluation procedures can be classified
according to various parameters:

- aim of evaluation (financing allocation)
- subject evaluated (individuals)
- evaluative methodology (peer review)
- objects to evaluate (research products)
- disciplines and scientific areas (technological)

Data analysis focuses on organizing and reducing the information collected into
themes or statistical descriptions and inferences (Fitzpatrick et al., 2011). For data
analysis, first the data was prepared and organized. Next the data was condensed into
themes using a matched methods process. Thirdly, the data was presented in an
appropriate form such as tables, figure, or narrative description.

Analysis of the data included the identification of key indicators and the
categorization of those indictors into themes (Monacciani, 2010). The indicators were
classified into the three guiding strategies defined in the resource strategy framework as a
way to sort the expenditures made at each school: Focus Time on Core Academics,
Create Individual Attention, and Invest in Teaching Quality. The first step in the data
analysis for this study was identifying the actual expenditures for which principals have discretion. Second, expenditure data collected based on identified indicators was categorized into the strategies identified by Miles and Frank (2006). The three guiding strategies in the resource strategy framework identified were (a) Focus Time on Core Academics, (b), Create Individual Attention and (c), Invest in Teaching Quality. A fourth category of “Other” was added for expenses that did not fit into any of the three guiding strategies. The financial data was identified, disaggregated and categorized based on thorough conversations with district budget analysts and technicians. When further examination or clarification of the data was required, other experts in the district were engaged to obtain a complete understanding of the information gathered or needed to complete the research and analysis.

Once the indicators were coded and categorized, a cluster analysis methodology was used to synthesize and interpret the data. The descriptive narrative analysis was used to examine the allocation of resources in each school. Graphs and tables offered consideration for the potential factors that existed in the decision making of principals. Data analysis was intended to offer insights into whether similarities or differences existed in schools that were in good academic standing based on state performance data and those that were not.

**Summary of Methodology**

This chapter summarized a quantitative method of inquiry that was appropriate for using an unbiased approach to investigate school budget expenditure data (Creswell, 2009). It included the context and participants for the research, as well as the procedures and analysis employed. The research from this study is designed to offer substantial
information on a variety of strategies employed at the school level to improve the use of resources available. The results offer policy makers information to determine if effective financial resource allocation by a building principal is important to a school’s performance.
Chapter 4: Results

The primary purpose of this study was to examine practices in the allocation of discretionary resources by principals in an urban school district’s elementary schools to determine what practices exist among high performing schools. Chapter 4 presents the research findings on how urban elementary school principals allocate discretionary funds. Using a matched sampling methodology, financial data was organized using the three guiding strategies identified in the resource strategy framework designed by Miles and Frank (2008). The framework consisted of three guiding strategies for the allocation of funds to create a strategic school. The first guiding strategy was the use of funds that Focus Time on Core Academics. Focus Time on Core Academics included resources that support extended learning blocks in the daily schedule and an offering of programs that ensure students meet rigorous academic learning standards. The second guiding strategy, Creating Individual Attention, included resources that support the effective use of data, creating opportunities for small group and individualized instruction, and developing structures for personal relationships between student and teachers. The third guiding strategy was Invest in Teaching Quality, characterized by the allocation of resources through hiring, professional development, job structure, and common planning time in the development and retention of highly effective teachers. In summary, the three guiding strategies were (a) Focus Time on Core Academics, (b) Create Individual Attention, and (c) Invest in Teaching Quality.
Budget data were collected from a variety of resources within the city district. The data provided commonalities in the distribution of discretionary funds and the practices that exist in eight schools. The schools were selected for the study based on their accountability status, also referred to as being in Good Standing. The findings represent a descriptive analysis of the difference in spending for schools in Good Standing and schools that are not, particularly highlighting the guiding strategy of individualized attention. Descriptive statistical analysis was used as the best mode to assess the differences and similarities that exist.

This chapter is organized to address each of the research questions:

Question one: How do elementary school principals in an urban school district spend their discretionary funds?

Question two: What are the budget practices of elementary principals in the allocation of discretionary funds in schools that have met Adequate Yearly Progress two consecutive years (Good Standing)?

Question three: What similarities or differences exist in the discretionary spending between principals of urban elementary schools that are in Good Standing and urban elementary schools that are not?

Accordingly, this chapter is organized in sections beginning with a description of the process for selection of schools and what data was gathered, sorted, and analyzed. The next sections, organized based on the research questions, provide an analysis of schools’ spending. The spending analysis consisted of an examination of the amount of and distribution of school discretionary funds based on the three guiding strategies and a fourth category of Other. The fourth category of “Other” was added in the analysis to
provide a statistical description of discretionary funds used for expenses, such as copier costs and custodial supplies that did not fall into the three guiding strategies in the resource strategy framework. The Other category also included funds used at the discretion of the principal to purchase classroom supplies and materials for instructional purposes. The next section describes the similarities and differences between matched schools using a descriptive analysis to determine what practices exist in the allocation of resources. The final section provides an analysis of the general trends that illustrate what practices in the distribution of discretionary funds exist that may lead to better student performance in urban elementary schools.

**School Selection Process**

Eight schools were selected for the study based on several factors to determine an appropriate sampling for a matched sampling methodology. In order to have actual school data, the 2009-2010 academic year was selected to allow for the most recent record of actual data in student achievement and expenditures. All elementary schools in the district were sorted into two categories using state accountability status based on student performance data collected from the Office of Accountability. For purposes of this study, schools were grouped into two categories: schools in Good Standing and schools not in Good Standing. Schools in Good Standing were those meeting Adequate Yearly Progress (AYP) as reported in the New York State Report Card.

Once the schools were divided into the two groups, they were sorted according to the percentage of total student enrollment within the following characteristics:

- Black/African American
- Hispanic/Latino
- White
- Economically Disadvantaged
- Limited English Proficient
- Students with Disabilities
- Students Tested

The schools were then categorized and sorted by characteristics and size. They were matched so that a school in good standing was paired with a school not in good standing that had the same set of characteristics. Table 4.1 shows a summary of the schools by demographics and school size.

The schools were chosen for this study based on their school accountability status, size and demographics. They were matched, based on the characteristics of accountability status, size and demographics so school pairs could be made for the study. Matches were created based on common attributes so that a statistical analysis could occur to assess if any differences or similarities in spending existed between schools. For purposes of this study, schools were paired and labeled by letter, and number. The letter indicates the matched school pair, and the number indicates school status, 1 is a school in good standing and 2 is a school not in good standing. Thus, A1 indicates a school in good standing and A2 indicates the school with similar demographics to A1, however, A2 is not in good standing.
Table 4.1

*Demographics of Selected Schools*

<table>
<thead>
<tr>
<th>School</th>
<th>N</th>
<th>Sub Groups</th>
<th>Accountability Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B/AA</td>
<td>H/L</td>
</tr>
<tr>
<td>A1</td>
<td>232</td>
<td>191</td>
<td>20</td>
</tr>
<tr>
<td>A2</td>
<td>263</td>
<td>248</td>
<td>8</td>
</tr>
<tr>
<td>B1</td>
<td>414</td>
<td>249</td>
<td>108</td>
</tr>
<tr>
<td>B2</td>
<td>393</td>
<td>172</td>
<td>157</td>
</tr>
<tr>
<td>C1</td>
<td>266</td>
<td>177</td>
<td>138</td>
</tr>
<tr>
<td>C2</td>
<td>342</td>
<td>205</td>
<td>66</td>
</tr>
<tr>
<td>D1</td>
<td>228</td>
<td>103</td>
<td>103</td>
</tr>
<tr>
<td>D2</td>
<td>285</td>
<td>166</td>
<td>86</td>
</tr>
</tbody>
</table>

*Note.* B/AA = Black and African American; H/L = Hispanic or Latino; W = White. SwD = Students with Disabilities; LEP = Limited English Proficient; EconDis = Economically Disadvantaged

**Data Selection Process**

Principals’ use of discretionary funds for the 2009-2010 academic year was collected using actual budget expenditures obtained from several departments in the district including the Office of Finance, the Office of Human Capital Initiatives, and the Office of Purchasing and Procurement. Categories for discretionary expenditures included items such as instructional materials, teacher substitutes, field trips, transportation, teacher hourly pay, contracts, and travel.
When the total amount for the discretionary expenses was gathered, the expenses were coded into the three guiding strategies based on the resource strategy framework (Miles & Frank, 2008). Coding was based on the description of each of the three guiding strategies in the framework: (a) Focus Time on Core Academics, (b) Create Individual Attention, and (c) Invest in Teaching Quality (Miles, 2001). Table 4.2 shows the expenditures that were coded as falling within those three guiding resource strategies.

Table 4.2 identifies examples of some of the spending that occurred and the guiding strategies used for coding expenditures based on the framework and the information received from the Office of Finance. Creating support for Focus Time on Core Academics included purchases or contracts for curriculum or any materials identified to support the instructional program. Resources sorted into Create Individual Attention included funds that could be used for extended learning opportunities such as teacher hourly pay for before and after school teacher sessions with students. Resources identified as fitting under the Invest in Teaching Quality guiding strategy included items that were intended to build teacher understanding of learning practices through professional development or professional texts such as practitioner journals and books on teaching theories and methods.
Table 4.2

*Strategies and Coding of Expenditures*

<table>
<thead>
<tr>
<th>Focus Time on Core Academics</th>
<th>Create Individual Attention</th>
<th>Invest in Teaching Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of teacher substitutes for additional time blocks within the day based on the substitute reason code</td>
<td>Assessment of student learning</td>
<td>Professional development</td>
</tr>
<tr>
<td></td>
<td>Small or individual instruction</td>
<td></td>
</tr>
<tr>
<td>Materials that support Core Academics</td>
<td>Structures that foster personal relationships between students and teachers</td>
<td>Additional compensation</td>
</tr>
<tr>
<td>Contracts</td>
<td>Extended day staffing</td>
<td>Professional resource materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substitute funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Travel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Additional Staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Additional teacher hourly pay</td>
</tr>
</tbody>
</table>

The first guiding strategy focused on any allocation of funds that could be used towards Focus Time on Core Academics. Discretionary funds coded as Focus Time on Core Academics included items such as the use of teacher substitutes for additional time blocks within the day based on the substitute reason code, materials that support core academics, and vendor contracts. The second guiding strategy, Create Individual
Attention, included expenditures such as activities and materials that supported the assessment of student learning, small or individual instruction, and structures that foster personal relationships between students and teachers. The third guiding strategy, Invest in Teaching Quality, included expenditures that could be attributed to using staff to fit school needs based on budget line items such as professional development, additional compensation, professional resource materials, substitute funds, travel, additional staff and/or additional hourly pay. For purposes of this study a fourth category called, Other, was added to include all other spending that could not be described as one of the three strategies. Discretionary spending in Other included items such as custodial supplies, copier contracts, and paper that support the daily functions of a school, but also included opportunities for spending that could be attributed to materials and activities that create an individualized school environment based on the context and mission of the school. For example, Other expenditures could include teacher made materials for classroom instruction and parent activities.

**Research Questions**

**Question one: How do elementary school principals in an urban school district spend their discretionary funds?** Table 4.3 represents the total percentage of a school’s budget and the percentage of the budget that is within the discretion of the elementary principals of the group studied. The total amount of nondiscretionary funds allocated to the schools was controlled and distributed by the central administrative office. The nondiscretionary funds in this table include, for example, all staff salaries, all operating and administrative allocations, and other administrative operating expenses.
Table 4.3

*Percentage of Discretionary Funding in Total Budget*

<table>
<thead>
<tr>
<th>Good Standing (1)</th>
<th>Not Good Standing (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretionary/Non-Discretionary</td>
<td>Discretionary/Non-Discretionary</td>
</tr>
<tr>
<td>A</td>
<td>9.10%/88.9%</td>
</tr>
<tr>
<td>B</td>
<td>9.45%/88/5%</td>
</tr>
<tr>
<td>C</td>
<td>2.92%/97.08%</td>
</tr>
<tr>
<td>D</td>
<td>9.86%/80.14</td>
</tr>
</tbody>
</table>

Table 4.3 indicates the percentage of the budget that is within the discretion of the principals, as well as the percentage of the budget that is controlled by the district office. The focus of this study is the way in which resources are allocated within the discretionary fund.

For purposes of this study the examination of only the discretionary funds is further analyzed. Table 4.4 describes the percentage of discretionary funds spent in each guiding strategy plus the Other category by every school in the study.
The data in Table 4.4 show that most schools used a greater percentage of their discretionary funds in the guiding strategy of Create Individual Attention. The guiding strategy in which the least amount was spent was in Invest in Teaching Quality. Two schools in Good Standing, A1 and D1, showed little to no allocation in this guiding strategy. The second largest percentage spent was in the Other category, and the third greatest percentage was in the guiding strategy of Focus Time on Core Academics.

The next table, Table 4.5 shows the average dollar amount expended by guiding strategy. This information gives a general understanding of the average amount spent by purchase within each guiding strategy.

### Table 4.4

*Percentage of Discretionary Funds by Guiding Strategy*

<table>
<thead>
<tr>
<th></th>
<th>Focus Time on Core Academics</th>
<th>Create Individual Time</th>
<th>Invest in Teaching Quality</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School A</strong></td>
<td><img src="#" alt="Percentage" /> 8.10%</td>
<td>11.90%</td>
<td>55.99%</td>
<td>47.97%</td>
</tr>
<tr>
<td><strong>School B</strong></td>
<td><img src="#" alt="Percentage" /> 13.21%</td>
<td>15.04%</td>
<td>55.40%</td>
<td>38.37%</td>
</tr>
<tr>
<td><strong>School C</strong></td>
<td><img src="#" alt="Percentage" /> 4.88%</td>
<td>22.31%</td>
<td>39.32%</td>
<td>24.30%</td>
</tr>
<tr>
<td><strong>School D</strong></td>
<td><img src="#" alt="Percentage" /> 11.20%</td>
<td>11.02%</td>
<td>68.67%</td>
<td>58.04%</td>
</tr>
</tbody>
</table>

69
Table 4.5

*Average Expended by Guiding Strategy School by School*

<table>
<thead>
<tr>
<th>Focus Time on Core Academics</th>
<th>Create Individual Time</th>
<th>Invest in Teaching Quality</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Standing (1)</td>
<td>Good Standing (1)</td>
<td>Not Good Standing (2)</td>
<td></td>
</tr>
<tr>
<td>A 29,298</td>
<td>38,904</td>
<td>202,546</td>
<td>156,881</td>
</tr>
<tr>
<td>B 75,621</td>
<td>36,572</td>
<td>317,066</td>
<td>93,319</td>
</tr>
<tr>
<td>C 5,721</td>
<td>53,235</td>
<td>46,094</td>
<td>57,975</td>
</tr>
<tr>
<td>D 37,914</td>
<td>59,021</td>
<td>232,532</td>
<td>310,892</td>
</tr>
</tbody>
</table>

*Note.* All amounts are in US Dollars.

The allocation of dollars spent by guiding strategy showed the greatest amounts to range from $0.00 to $310,892.00. However, deeper analysis was required to gain a greater descriptive statistical analysis. In order to better analyze how funds are spent by schools, a further analysis was calculated based on a per pupil basis expenditure in each guiding strategy. Figure 4.1 shows the allocation of funds per pupil in each guiding strategy.
In the area of Focus Time on Core Academics, the range of per pupil amount from $93.06 to $207.09 with the median being $155.66. The table Focus Time on Core Academics shows that the amount of per pupil expenditure in does not appear to be related to school size or need, but that schools not in Good Standing tended to spend more in this category that schools in Good Standing. Therefore, neither size nor the demographics of the school appears to a compelling force in per pupil spending in this guiding strategy.

In the guiding strategy Create Individual Attention, the table shows that schools spent a greater amount in Create Individual Attention than in Focus Time on Core Academics.

![Table: Per Pupil Amount for Focus Time on Core Academics by School](image)

![Table: Per Pupil Amount for Create Individual Attention](image)

![Table: Per Pupil Amount for Invest in Teaching Quality](image)

![Table: Per Pupil Amount for Other](image)

*Figure 4.1. All schools spending by guiding strategy.*
Academics, and that it was the highest per pupil amount of all three guiding resource strategies. The greatest amount per pupil was $1,190.88, and the lowest was $169.52. The table also shows that schools spent a greater amount in Create Individual Attention than in Focus Time on Core Academics. Create Individual Attention is the highest per pupil amount of all three guiding strategies. The greatest amount per pupil was $1,090.85, and the lowest was $169.52.

In the guiding strategy, Invest in Teaching Quality, the table shows that it had the lowest amount of per pupil spending of the three guiding strategies in the framework. Table 4.6 shows that per pupil spending in Invest in Teaching Quality ranged from $0 to $303.89. In addition, a trend that existed among all schools, regardless of size or demographics, was that Invest in Teaching Quality had the least per pupil expenditure of any guiding strategy in the resource strategy framework.

In the category of Other, Figure 4.1 shows that the range of spending in the Other category is from $192.16 to $559.86 and the median is 227.92. Overall, there does not appear to be a trend in per pupil spending by the size or demographics of the school in the Other category.

In summary, Figure 4.1 shows that the greatest expenditure in a guiding strategy was found in Create Individual Attention and the least in Invest in Teaching Quality.

**Question two:** What are the budget practices of elementary principals in the allocation of discretionary funds in schools that have met Adequate Yearly Progress two consecutive years (Good Standing)? The next table, Table 4.6, shows spending in schools in good standing in all strategies and including the Other category. For analysis of this data, the median and mean were calculated to assess any discrete differences in
spending. Given the sample size, an analysis of findings was based on the median calculation. Based on the median number, the guiding strategy with the most per pupil amount to the least was (a) Create Individual Attention, (b) Focus Time on Core Academics, (c) Invest in Teaching Quality. When considering all four, the added category, Other, had the second highest expenditure.

Table 4.6

*Per Pupil Amount per Guiding Strategy for Schools in Good Standing*

<table>
<thead>
<tr>
<th>School</th>
<th>Focus Time on Core Academics</th>
<th>Create Individual Attention</th>
<th>Invest in Teaching Quality</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>$126.29</td>
<td>$873.04</td>
<td>$0</td>
<td>$559.86</td>
</tr>
<tr>
<td>B1</td>
<td>$182.66</td>
<td>$765.86</td>
<td>$178.65</td>
<td>$225.17</td>
</tr>
<tr>
<td>C1</td>
<td>$155.66</td>
<td>$173.28</td>
<td>$53.74</td>
<td>$192.16</td>
</tr>
<tr>
<td>D1</td>
<td>$166.29</td>
<td>$1,019.88</td>
<td>$5.40</td>
<td>$293.55</td>
</tr>
</tbody>
</table>

**Summary**

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Summary Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Time on Core Academics</td>
<td>$160.98</td>
<td>$157.73</td>
</tr>
<tr>
<td>Create Individual Attention</td>
<td>$819.45</td>
<td>$708.02</td>
</tr>
<tr>
<td>Invest in Teaching Quality</td>
<td>$29.57</td>
<td>$59.45</td>
</tr>
<tr>
<td>Other</td>
<td>$259.36</td>
<td>$317.69</td>
</tr>
</tbody>
</table>

School C1 had an overall per pupil allocation distribution significantly different from the other three schools in Good Standing. The allocation in school C1 was more evenly distributed across categories than the other schools. Additionally, school C1 had the least discretionary funds.

Given that the guiding strategy of Create Individual Attention had the highest per pupil amount, detailed expenditures were further analyzed to identify if any patterns
existed. Based on the analysis, three accounts had the greatest allocation: teacher salary hourly, paraprofessional substitutes, and clerical overtime. Based on the data collection source, these funds appear to have been used for creating opportunities for teachers to work with students before or after school or in settings other than the classroom.

Table 4.7 illustrates the per pupil allocation and the median number for three accounts with the greatest spending in the Create Individual Attention guiding strategy.

Table 4.7

Per Pupil Amount in Create Individual Attention

<table>
<thead>
<tr>
<th>School</th>
<th>Account</th>
<th>Amount</th>
<th>Account</th>
<th>Amount</th>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Teacher Salary</td>
<td>$165.90</td>
<td>Paraprofessional</td>
<td>$687.49</td>
<td>Clerical Non-instructional subs</td>
<td>$151.01</td>
</tr>
<tr>
<td>B1</td>
<td>$564.18</td>
<td>$687.49</td>
<td>$151.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>$0.42</td>
<td>$169.09</td>
<td>$162.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>$977.29</td>
<td>$42.11</td>
<td>$182.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summary Median</td>
<td>$365.04</td>
<td>$428.29</td>
<td>$156.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summary Mean</td>
<td>$426.95</td>
<td>$396.55</td>
<td>$161.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The calculations indicate that the paraprofessional substitutes’ median is the highest per pupil amount and teacher salary hourly is the second largest amount. There is a wide range in both accounts. The clerical account is relatively even in its range of per pupil amount.

**Question three:** What similarities or differences exist in the discretionary spending between principals of urban elementary schools that are in Good Standing
and urban elementary schools that are not? In order to analyze the differences between the matched pairs, the median of per pupil expenditure by guiding strategy was used. Table 4.8, shows the median and mean for all three guiding strategies, plus the Other category. The table shows the difference in the median for Invest in Teaching Quality for schools in Good standing, which is $29.57 and $105.64 per pupil for schools not Good Standing. Whereas, in the Create Individual Attention guiding strategy, schools in Good Standing median number was $819.45, which is almost twice as much as the schools not in Good Standing median number at $416.98 per pupil.

Table 4.8

<table>
<thead>
<tr>
<th>Good Standing and Not Good Standing Per Guiding Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Good Standing</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Focus Time on Core Academics</td>
</tr>
<tr>
<td>$160.98</td>
</tr>
<tr>
<td>Create Individual Attention</td>
</tr>
<tr>
<td>$819.45</td>
</tr>
<tr>
<td>Invest in Teaching Quality</td>
</tr>
<tr>
<td>$29.57</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>$259.36</td>
</tr>
</tbody>
</table>

Due to the high per pupil expenditure in Create Individual Attention, further analysis of the guiding strategy was conducted by school status. Table 4.9 shows that the median per pupil expenditure in two of the three accounts within the guiding strategy were approximately twice as much for schools in good standing than those not in good standing. The high spending was in were for teacher salary hourly and paraprofessional
substitutes. The median value for clerical non instructional, which is office related support was relatively the same among all schools.

Table 4.9

Schools in Good Standing and Not Good Standing by Account within Create Individual Attention

<table>
<thead>
<tr>
<th></th>
<th>Good Standing</th>
<th>Not Good Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>Teacher Hourly</td>
<td>$365.04</td>
<td>$426.95</td>
</tr>
<tr>
<td>Paraprofessional Substitutes</td>
<td>$428.29</td>
<td>$396.55</td>
</tr>
<tr>
<td>Clerical Non Instructional</td>
<td>$156.74</td>
<td>161.73</td>
</tr>
</tbody>
</table>

Further descriptive statistical analysis of trends in decision making included principal years of experience, per pupil spending, and school status in each guiding strategy as shown in Table 4.10. Experienced principals are defined in this study as those with six or more years of experience, and less experienced principals are those with five or fewer years of experience. Five years was used based on general understanding of the amount of time a principal is able to adjust to the job role and make substantive changes in a school (Marzano, 2001).
Table 4.10

*Principals’ Experience and Per Pupil Allocation by Guiding Strategy*

<table>
<thead>
<tr>
<th></th>
<th>More than 5 years</th>
<th>5 or fewer years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>Focus Time on Core</td>
<td>$174.47</td>
<td>$170.58</td>
</tr>
<tr>
<td>Create Individual Attention</td>
<td>$946.46</td>
<td>$937.41</td>
</tr>
<tr>
<td>Invest in Teaching Quality</td>
<td>$178.65</td>
<td>$162.65</td>
</tr>
<tr>
<td>Other</td>
<td>$285.54</td>
<td>$346.53</td>
</tr>
</tbody>
</table>

Analysis of the median number in Table 4.11 indicates that more experienced principals showed similar trends by spending more than twice as much per pupil in two guiding strategies. For the guiding strategy Invest in Teaching Quality, the median number for more experienced principals was $176.65, and less experienced was $60.12. In the Create Individual Attention guiding strategy, more experienced principals spent $946.46 and less experienced spent $205.37.

The scatterplot in Figure 4.2 provides further analysis by illustrating the regression line among principals based on years of experience. In addition, it gives a representation of the spending patterns of schools in good standing and not in good standing based on years of experience and per pupil amount spent for total discretionary funding.
Figure 4.2. Principal experience and guiding strategy.

The data in Figure 4.2 show that three of the four schools in good standing have the overall funding highest per pupil amount than the less experienced principals. One school in good standing, C1, was the least experienced principal in Good Standing and had the least amount of total discretionary funds.

Figure 4.3. Principals’ experience by Focus Time on Core Academics.
Figure 4.3 shows the scatterplot in the guiding strategy of Core Academics. The regression line shows a greater relationship between years of experience and schools in good standing.

![Create Individual Attention](image)

**Figure 4.4.** Principal experience by Create Individual Attention.

In Figure 4.4, the regression line shows a greater relationship between spending, years of experience and schools in Good Standing. Three of the four schools in good standing have the most experienced principals, the most funds, and the highest per pupil funding in the Create Individual Attention strategic area.

The next figure, Figure 4.5 shows the analysis of principal experience by Invest in Teaching Quality.
Figure 4.5. Principal experience by Invest in Teaching Quality.

Figure 4.5 shows little to no relationship between spending and years of experience that can be correlated with each other or a school in good standing or not in good standing.

Figure 4.6 shows the scatterplot for the Other category.

Figure 4.6. Principal experience by Other.

The data in Figure 4.6 show no statistical relationship between spending and years of experience regardless of whether the school was in Good Standing and not Good Standing. Overall, the spending was similar to each school’s per pupil allocation.
Summary

The purpose to this study was to examine the distribution of discretionary resources by elementary principals in urban schools to identify what practices exist among high performing schools. This chapter described how schools for this study were strategically selected based on schools’ accountability status and identified demographics. The selection of schools, described in this chapter, was done with the intent to determine matched groups for the analysis of similarities and/or differences in the allocation of discretionary funds made by urban elementary school principals. In addition, this chapter quantitatively identified significant practices that existed in schools in Good Standing and whether the practices in using funds could be attributed to the creation and maintenance of high performing schools. Furthermore, the chapter attempted to identify if there were differences in practices between high versus low performing schools of similar size and demographics.

The data was sorted into the three guiding strategies identified in the resource strategy framework. Once the data was collected, sorted, and analyzed by guiding strategy, a matched sampling analysis was done using a descriptive analysis of per pupil expenditures. Based on the results, the allocation of Create Individual Attention, as practiced by schools in Good Standing, was identified as being worth further consideration. Furthermore, although the analysis of the matched sampling revealed no statistical difference in the allocation of dollars, a statistical difference was found in schools that spent funds in the area of Create Individual Attention. This finding will be discussed in Chapter 5.
Chapter 5 will discuss the findings presented in Chapter 4 through a synthesis of the data and offer will recommendations to the field for practice and for further study in the area of resource allocation in urban elementary schools. It will discuss the findings of the research, limitations of the study and recommendations for principals, district administrators and institutions of higher learning regarding the strategic allocation of resources in urban schools.
Chapter 5: Discussion

Introduction

The purpose of this quantitative study was to examine the distribution of discretionary resources by elementary principals in urban schools and identify what practices exist among high performing schools. Chapter 5 discusses the findings and limitations of the study and concludes with recommendations for future research and a summary of the dissertation.

This study analyzes the discretionary spending practices of a group of urban elementary school principals in order to examine how urban school principals address the needs of students. The study shows that budget practices that support an individualized learning environment are most effective in addressing the needs of students.

Findings from this study add to scholarly understandings related to urban school principals’ budget practices, professional practices for district level administrators, and higher education training programs for school and district level administrators. The results from this study also contribute to research that asserts that urban schools struggle to meet the needs of their students while resources have declined and accountability measures have risen (Hanushek, 1994, Hawley & Miles, 2008, Miles & Darling-Hammond, 1997). Accordingly, it is urgent and critical to meet the educational needs of students who disproportionately come from economically disadvantaged homes, first generation immigrants from non-English speaking countries, and single parent households (Goertz & Steifel, 1988). School finance reform and allocation has emerged
as a critical component for the transformation of urban public schools in the U.S. (Gloudemans, 2010). Understanding how urban school principals allocate resources is worth investigation.

The findings of this study add to previous research regarding trends in principals’ resource allocation practices (Hanushek, 1994). Results from this study also support the body of studies that show that high performing urban schools are led by principals who practice effective resource allocation strategies in their schools (Miles & Frank, 2008). The study reveals that principals’ allocation practices can be attributed to specific strategies to best meet the needs of their students through budgetary decisions. Findings from this study identify patterns of resource allocation practices that exist among urban elementary principals of schools in good standing in a large city in western New York State. Furthermore, this study offers findings regarding equity and a principal’s ability to adequately meet the needs of students (Rebell, 2008). The study supports the assertion that financial equity is important in the ability of urban schools to meet the needs of students.

**Discussion of Results**

In general, the study shows that schools use discretionary funding to address the individual needs of students, improve teacher quality, and build core academic curriculum and activities in varying amounts and ways. A critical analysis of patterns of spending based on the resource strategy framework developed by Miles and Frank (2008) provides evidence that school principals use most of their discretionary funds to address the individual needs of their students. The findings also show that allocations for core
academic needs are the second largest area of spending. The least amount is spent on developing teacher quality.

More specifically, several key findings show how funds are allocated including inequities in discretionary budget allocations, how principals of schools in Good Standing, and how principals from schools in Good Standing allocate funds differently than principals from schools Not in Good Standing.

**Inequities in discretionary budget allocations.** Analysis shows that discretionary budget allocations from district offices do not necessarily correspond to the needs of the students served. For instance, schools that had a higher number of students with disabilities or English language learners did not have more discretionary funds than schools with a lower percentage of these student populations. Additionally, there was a range of funding with no clear pattern for distribution. Findings in the study are consistent with claims that there is a lack of transparency in funding and that inequities exist in the distribution of funds made to schools by central level administrators. This exposes that the perception of some principals’ feelings about inequities in district budget allocation is indeed true. Principals’ assertions of inequities were revealed in the data collection and require intentional district level attention to address this issue.

The discrepancy in the allocation of funds is consistent with the findings of Rebell (2008) who contends that there are inequities in the distribution of funds among schools. Findings in this study show that principals’ perceptions of inequities do exist, are a valid concern, and therefore must be addressed by district level administrators. The study shows evidence that should encourage district level administrators to actively address the issue of budget equity across all schools to build trust in the relationship between central
office and building principals. Understanding and addressing issues of budget equity across all schools should also address the strategic allocation of resources needed to improve all schools’ performance.

As shown in Table 5.1, the levels of discretionary spending in all eight schools studied reveal that there are variations in the percentage of funds within a principal’s discretion. Specifically, some principals had almost five times as much discretionary funding than other principals. These results support Rebell (2008) who stressed that inconsistent school budget allocation practices create inequities in education services and create an overall distrust among principals about district level decision making.

Table 5.1

<table>
<thead>
<tr>
<th>Percentage of Discretionary Funding in Total Budget</th>
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</thead>
<tbody>
<tr>
<td>Percentage of Discretionary Funding in Total Budget</td>
</tr>
<tr>
<td>Good Standing (1)</td>
</tr>
<tr>
<td>Discretionary/Non-Discretionary</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
</tbody>
</table>

Table 5.1 shows a descriptive statistical analysis that supports the common complaint among principals regarding the unpredictable practices that exist in the amount and percent of discretionary funds available to each school (Ladd & Fisk, 2009). Principals believe that district level decisions are neither transparent nor related to student needs but are based on arbitrary reasons unknown to leaders across the district.
Additionally, principals contend that if they had more dollars combined with greater
discretion they could create more successful schools. Again, data from the study show
that inequities exist in the amount of funds available to principals and must be considered
at the district level when planning for school improvement.

Common knowledge holds that district level administrators place more trust in all
levels of decision making in successful school principals with more experience. As
Figure 5.1 shows, the data support the assumption that more discretionary funding is
provided to principals with more experience and whose schools have shown greater
student achievement.

Figure 5.1. Total funding based on principal experience.

Regardless of reasons for disparities in funding, it is incumbent upon district level
administrators to build capacity in school finance practices among all principals in the
organization. In order for principals to improve schools and make meaningful budgetary
decisions, limiting funds based on school performance may have the reverse effect in
achieving the ultimate goal of improving student learning. More resource discretion
paired with greater opportunity for professional development for principals is necessary to ensure effective budget management and school improvement.

The findings imply that school district officers may be unaware of how their budgetary procedures impact a school’s performance. District officers with responsibility for district and school budgets must give attention to what changes need to be made to address equity and adequacy issues of budgets provided to all schools and the associated professional development needed to overcome this challenge.

**Effective spending practices: principals of schools in Good Standing.** This study reinforces the vital need for principals to address the individual needs of students when making decisions about the allocation of funds. Previous research shows that urban school principals’ funding practices focus on creating a highly individualized student environment that best supports student achievement (Katz & Earl, 2010). The findings provide evidence that principals in effective schools spend the greatest amount of their discretionary funds in the strategy Create Individual Attention. This spending pattern reveals that principals value the need to individualize education for each student to be successful. The findings in this study also reinforce the research claims that urban school principals must meet the individual needs of all students to be successful (Hedges, Laine & Greenwald, 1994). Recognizing that urban school students possess a multitude of individual needs due to demographic and social factors, principals of schools in Good Standing use budget strategies that depart from generalized approaches to teaching by spending discretionary funds on practices that support the personal needs of each student.
As illustrated in Table 5.2, the findings reveal that, although all schools spent money in creating a personalized environment, schools in Good Standing spent almost twice as much in the guiding strategy Create Individual Attention than schools not in Good Standing.

Table 5.2

<table>
<thead>
<tr>
<th>Good Standing and Not Good Standing in Create Individual Attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Standing</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Create Individual Attention</td>
</tr>
</tbody>
</table>

A deeper analysis of the monies spent within the Create Individual Attention guiding strategy shows that funding additional teacher and paraprofessional time is critical in achieving this goal. According to District budget analysis, funding for additional adult time with students is within the principals’ discretion to meet the needs of the school environment. Spending practices designed to create an individualized learning environment include adult time that offers opportunities for individual tutoring, class size reduction, extended day learning programs, teacher time for data collection, grade level team meetings, literacy and math coach work sessions, standards based lesson development, and peer observations. Knowing that individual attention is vital to a child’s learning, principals in this study give credence to this well known assertion (DuFour, 2004).

Spending patterns in this study are consistent with research of principal practices which show that creating a highly personalized environment includes using funds to support the whole child (Miles & Darling-Hammond, 1997). Too often, students in urban
elementary schools lack quality choices for before and after school activities. Therefore, principals often use discretionary funds to offer opportunities to address the needs of the whole child. The data findings from this study from principals in Good Standing, offer compelling evidence for other principals to provide before and after school activities such as individual tutoring, teacher led academic clubs, sports clubs, and a combination of school, district and community efforts that meet the social and emotional needs of students. The study shows that high performing schools had principals who used some of these options as a way in which to improve school performance, therefore these spending practices and strategies should be considered by other principals as a way to improve their schools.

The study also provides evidence that funds in the Create Individual Attention guiding strategy include spending that addresses meaningful engagement of families in their child’s learning. Parent engagement in urban schools is essential to the improvement and sustainability of a performing school’s success. Parent activities that build understanding of the curriculum and school environment can be found in the use of funds. Math festivals, book fairs, school celebrations and exhibitions of student work are parent activities offered in schools in Good Standing. Research supports the claim that all activities must include student engagement to maximize the connections between school, child and family (Odden, 2009). As described in this study, spending that supports family engagement shows that principals who take the time and effort to create an environment that is designed to meet the needs of their parents reap the benefits through improved student performance.
Results from this study also make known that principals in Good Standing spend the second largest amount of their funds in the Other category. Funds in this category can be attributed to the individualization of materials, celebration of learning events, learning products, and/or teacher made materials. These are key strategies in spending that allow for the creative pairing of funds with a highly personalized school environment. An analysis of the findings shows that principals’ use of funds that do not fit neatly into one of the strategies identified by Miles and Frank (2006) allows for the creative use of dollars to meet the unique needs of students. Information from the data analysis in this study provides compelling evidence for principals to creatively blend dollars to meet the diverse needs of their school communities, for example the pairing of funds that create a personalized school environment with other spending that matches the attainment of this goal.

Findings on spending in Focus on Core Academics show that principals spend less in this guiding strategy than the Other category. Further analysis of the data indicates that it is not because principals in Good Standing do not value Focus Time on Core Academics. Instead, it is ascertained that they spend less in this category because these principals strategically address curriculum and academics in more creative and strategic ways. More specifically, the findings in the Focus Time on Core Academics guiding strategy show that the creative funding decisions for curriculum made by principals may be found in the Other category. Such decisions offer compelling evidence for principals to creatively combine funds to meet the diverse needs of their school communities.
This study also illustrates that the least discretionary spending occurs in the Invest in Teaching Quality guiding strategy. Reeves’ (2006) research on principals in high performing schools shows that a high value is placed on teacher quality, so it is important to note that spending in this guiding strategy may not express the value a principal places on teacher quality. Knowing that principals of schools in Good Standing value teacher quality, the finding on Invest in Teaching Quality indicates that discretionary funds may be best spent in creating an individualized environment. Planning for teacher development therefore occurs in other ways. For example, principals’ support of teacher development can occur through volunteer efforts, before and after school collaborative meetings, district initiatives that are not accounted for in a school budget, and/or creative scheduling that allows for co-planning, grade level meetings, or peer mentoring. Additionally, the quality of teachers in schools in Good Standing may be somewhat different than the quality of teachers in lower performing schools. There may be more experience or optimism or a deeper sense of collegial spirit. Overall, evidence supports the idea that principals can address teacher quality in ways that are cost neutral thus allowing principals to divert spending to activities that create a personalized school environment. In addition, the data in this study regarding the spending practices in principals in high performing schools offer compelling evidence that building teacher capacity isn’t accomplished through funding. The conclusion from the data, therefore, recognizes that principals in high performing schools improve teacher practice through the strategic development of a professional learning community that meets the needs of all teachers. In short, teacher quality is not built through dollars, but through intentional and strategic planning by the school principal.
In summary, an analysis of the data shows that effective spending practices exist in principals in schools in Good Standing which offers evidence for principals to creatively combine dollars to meet needs of their school communities. The strategic pairing of discretionary funds made by principals in high performing schools shows that funds used to create an individualized learning environment paired with creative spending that aligns to the unique needs of a school may lead to improved student success. This is illustrated in Figure 5.2.

![Effective Spending Practices: Principals of Schools in Good Standing](image)

*Figure 5.2. Effective Spending Practices: Principals of Schools in Good Standing.*

In addition, Figure 5.2 also shows that different resource allocation theories are helpful when considering ways discretionary funds support the development of a high performing school.

**Boundaries to the spending and resource strategies framework.** While the resource strategy framework (Miles & Frank, 2008) offers a simplified way to sort and understand spending strategies, the framework is in contrast with some of the findings from this study. For example, this study indicates that there are gaps in Miles and Franks’ assertion that effective principal funding practices fall into three clear strategies. The study indicates that spending cannot be simply organized into three strategies. The
A more nuanced method is needed in order to describe spending practices that allows for the freedom and imagination of a principal to create a highly engaging and successful school. The simplistic nature of Miles and Franks’ model results in a lack of recognition of spending in other areas that don’t fit neatly into the three guiding strategies in the resource strategy framework. The framework doesn’t account for the pairing of funds that principals use to create a highly personalized learning environment. This would include unique expenditures that can’t be accounted for in the framework such as individualized teacher-made materials.

The findings from this study, however, do mesh with the work by Hanushek (1996). Hanushek argued that the effect of resource allocation should be assessed within the context of each school. Findings from this study support the need for principals to have discretion over funds, regardless of amount, in order to design a personalized environment for students. Trends in spending should be based within the context of each school. In sum, principals should have the freedom to make meaningful and thoughtful funding decisions based on the individual needs of their students, parents, and teachers. It is highly important for principals to be able to have the discretion and resources to develop programs and structures that best meet the unique needs of their school population.

Urban principals need to be able to make financial decisions that meet the complex needs of their students to improve performance. Hanushek (1996) recognized that the adequacy of funds is important but goes further to suggest that how the funds are spent is as critical as the amount. The study shows that a concentration on efforts that
support an individualized learning environment is the most effective way in which to address the needs of students.

Odden and Picus (2008) and Miles and Frank (2008) assert that effective patterns or trends in resource allocation in high performing schools exist, and can be aligned with a school’s ability to meet students’ needs. Miles and Frank’s research and this study reveal trends in principals’ decision making in urban schools that show schools in Good Standing have commonalities in their spending. A specific focus on individual student attention combined with spending aligned with other school finance approaches is the best way for a principal to approach the allocation of resources.

**Comparative spending practices between schools in Good Standing and not Good Standing.** Findings show that there are similarities and differences between the discretionary spending of schools in Good Standing and schools not in Good Standing. Overall all schools spent most in Create Individual Attention, but the median amount varied between matched groups and groups as a whole. Specifically, schools in Good Standing have the largest median summary in Create Individual Attention, and schools not in Good Standing spend twice as much in the area of Invest in Teaching Quality (Table 5.3). According to Miles and Frank (2008), assumptions regarding the understanding of practices for time and effort expended by principals may account for this difference. The study supports this theory based on the spending practices of the matched schools. In this study, practices of schools in Good Standing suggest more strategic thinking and planning since less is spent in categories for purchases of goods and more on practices that support the personalized needs of their schools.
Table 5.3

*Good Standing and Not Good Standing Per Guiding Strategy*

<table>
<thead>
<tr>
<th>Guiding Strategy</th>
<th>Good Standing</th>
<th>Not Good Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>Focus Time on Core Academics</td>
<td>$160.98</td>
<td>$157.73</td>
</tr>
<tr>
<td>Create Individual Attention</td>
<td>$819.45</td>
<td>$708.02</td>
</tr>
<tr>
<td>Invest in Teaching Quality</td>
<td>$29.57</td>
<td>$59.45</td>
</tr>
<tr>
<td>Other</td>
<td>$259.36</td>
<td>$317.69</td>
</tr>
</tbody>
</table>

The findings provide greater understanding of spending practices of principals in urban elementary schools with a particular focus of differences between schools in Good Standing and those not in Good Standing. Trends exist in the proportion and amount of spending between schools in Good Standing and schools not in Good Standing. Similar to Miles and Frank’s (2008) assertion, high performing schools allocate funds strategically. However, the proportion and type of spending do not follow one course of thought. For example, this study shows that the guiding strategy of Create Individual Attention may contribute to student outcomes in a school. Schools in Good Standing as a group spend a greater percentage of their funds in this category as a way to best meet the needs of students. Importantly, this allocation is paired with discretionary funds that fall into the Other category which allows for a combination of funds that creates a highly individualized student environment. Additionally, schools in Good Standing spend less
than schools not in Good Standing in Invest in Teaching Quality, concluding that the principals leading schools in Good Standing use the discretionary funds based on the context of their school needs and environment. Again, spending practices in this study illustrate that principals in Good Standing seek ways to improve teaching quality that don’t require school funds. Funding patterns imply that principals in Good Standing employ leadership practices that build teacher development and professional learning communities in thoughtful ways that require the braiding of funding theories to maximize dollars and improve student achievement.

Upon reflection and analysis of the data, not all of the characteristics of building a high performing school can be seen through the lens of spending. The ability to build a high performing school requires leadership skills that rely on the identification of the school vision that aligns spending with the ability to work towards that vision.

Limitations

The dissertation study provides information regarding the practices in discretionary resource allocation made by urban school principals. However, the sample size of eight schools has limitations. A larger sample size might provide more information across a wider spectrum of matched schools. Though the sample size provides a manageable group for analysis, it offers low statistical authority, which is why descriptive statistics were used to analyze the data. A larger sample size could generate correlations that are not evident with the smaller sample size. In addition, a qualitative component involving methods such as interviews or focus groups might have offered a deeper analysis of allocation decisions made by principals.
Lastly, the ability to develop a high performing school can’t solely be attributed to spending decisions. Future studies should therefore take into consideration other theories of high performing schools’ practices.

**Recommendations for Research and Practice**

The examination of elementary school principals’ discretionary spending provides an opportunity for recommendations related to resource allocation for principals, district level administrators, higher learning institutions, and policy makers.

**Recommendations for principals.** The data show that schools in Good Standing have patterns of higher spending in Create Individual Attention. Funding practices that allow for individual tutoring, small group instruction, and teaching practices that are designed to address specific needs of each child should be considered by urban school principals when allocating funds to provide a more individualized environment for students. Consideration of individual needs should be part of the strategic thinking in budget planning. Although individualizing the school environment is not the only consideration in resource allocation, it deserves attention in decision-making as it may offer strategies to create a higher performing school. This is an important finding in the research knowing that students in urban school settings possess a variety of learning needs that require thoughtful and intentional teaching to meet their individual learning needs to be successful (Marzano, 2001). Based on the finding that funds spent on creating individual attention are a priority for urban principals in high performing schools, continued research may offer greater insights into best practices in resource allocation and offer added detail on practices in resource allocation and student outcomes. Principals should also consider integrating funding theories in times of
increased accountability and decreased budgets as a way in which to build a high performing school.

**Recommendations for district administrators.** Findings from this study have implications for district level administrators. The inconsistency in the percentage of school budgets within the discretion of principals is reason for district level leaders to explore equitable funding opportunities for all schools. The variance of discretionary funds a school principal can leverage seems closely connected to the years of experience a principal possesses. As a result, district administrators should assess the amount of discretionary spending offered to all principals, and this decision should be clearly outlined and communicated to building level leaders. Developing leaders is critical to the growth of a school district. Therefore, building strong and trusting relationships with school principals is essential. Thus, clear understanding and messaging to schools about available resources should be an important goal of district leadership.

**Recommendations for institutions of higher education.** The need exists for pragmatic learning in the area of finance and resource allocation for future leaders. In light of the problems that face urban education, more rigorous accountability measures, and declining resources, it is incumbent upon colleges and universities to prepare leaders to effectively allocate resources. The study’s findings of inequities in funding, as well as the budgetary decision-making process of effective principals provide insights that can be used to develop future school leaders.

**Conclusion**
The study suggests it may be valuable for principals to integrate the theories of resource allocation to help create the foundation for high performing urban elementary schools. Hanushek (1996) asserts that the amount of funding is less critical than the way in which the funds are spent, and Miles and Frank (2008) identify a strategic framework for allocating funds. This study indicates that the resource strategy framework can guide strategic decision-making (Miles & Frank, 2008) only when it is done within the context of the school and its environment and structures (Odden & Picus, 2008). Figure 5.3 is a resource allocation thinking map that provides principals with a tool to connect funding theories for budget decisions.

In an effort to improve student achievement in urban schools, districts and researchers have sought ways to address the problem of resource allocation. However a significantly unexplored and untested area of school effectiveness is the relationship between school spending and principal practice. Based on the current trajectory in state
budgets, schools will continue to face budget deficits and cuts even as there is growing pressure for schools to improve student performance. Figure 5.3 is designed to assist principals with making decisions for their schools based on multiples theories connected to spending practices in school communities.

This study examined the distribution of discretionary resources by elementary principals in urban schools to determine what practices exist among high performing schools as compared to schools Not in Good Standing. The study provides insights into strategic resource decisions that can positively impact student performance.

Scholars agree that spending is an important area to analyze to offer the field practices that will help address improving urban schools (Jimenez-Castellanos, 2010, Miles & Rosa, 2006, Odden & Picus, 2008). The quantitative study includes the actual expenditures made in the 2009-2010 school year from eight selected schools based on state accountability measures of student performance. The schools were paired by documented demographic information. The pairing allowed for a comparative analysis of the budgetary practices of schools in Good Standing and schools struggling to meet the needs of their students.

Through the use of descriptive statistical analysis, the study assessed schools’ spending practices as delineated by the resource strategy framework developed by Miles and Frank (2008). The theoretical framework provided a structure for organizing and analyzing the expenditures. Analysis included sorting the financial data into the three guiding strategies identified by Miles and Frank (2008) with the additional category of Other. The three guiding strategies for spending are (a) Focus Time on Core Academics, (b) Create Individual Attention, and (c) Invest in Teaching Quality.
Results from the research suggest that certain strategies may be useful in making decisions in the allocation of discretionary resources. The data made known that the Create Individual Attention guiding strategy offers the most evidence of critical spending compared to the other categories. Strategic budgetary decisions should consider spending funds that create an individualized environment. The type of expenditures may vary based on the context of the schools and the students it serves. However, resources related to providing a school community that meets the individual needs of its students should be considered.

This study also offers insights into other factors related to resource allocation, including the amount of the discretionary monies a principal is able to control. Findings suggest that the experience of the principal may be a factor in determining the district allocation of discretionary funds and such practices that should be studied by district level administrators. District level administrators may be able to use this finding to design and provide mentorship and training in effective budgeting through a comprehensive professional development plan that addresses the training needs of all principals, particularly newer and less experienced principals.

Applying the resource strategy framework to the matched sampling highlighted that there are complex factors in analyzing budget practices. The overlap of the allocation of funds and how the principal’s experience and district resources can impact the outcome of schools is not immediately evident in the resource strategy framework. Further examination, may offer greater understanding of how the guiding strategies, such as Invest in Teaching Quality, are addressed in a school building. In sum, the resource
strategy framework offers a meaningful structure for analysis of spending, but does not account for spending in the category called Other in this study.

The implications of this study affect principals, district leaders and institutions of higher learning. The identified practices of elementary urban principals in schools in Good Standing offer the field with some new considerations when planning and preparing school budgets. The study also suggests that leadership training programs include practical finance and budget advice for aspiring leaders.

In conclusion, research on understanding the practices in resource allocation by urban elementary schools is pertinent and crucial. As principals are given greater authority over spending, urban school principals are faced with the challenges of greater accountability and declining resources. The analysis of practices in the allocation of discretionary resources will continue to be an important topic of research. Urban school principals across the country need targeted approaches for creating schools that serve all children effectively.
References


Appendix A

Institutional Review Board Approval

March 29, 2012

Elizabeth Mascetti-Miller
143 South Main Street
Pittsford, NY 14534

Dear Ms. Mascetti-Miller:

Thank you for submitting your research proposal to the Institutional Review Board.

I am pleased to inform you that the Board has approved the proposal entitled, “Best Practices in Resource Allocation in Urban Elementary Schools.”

Following federal guidelines, research related records should be maintained in a secure area for three years following the completion of the project at which time they may be destroyed.

Should you have any questions about this process or your responsibilities, please contact me at 585-5352 or by e-mail to emascetti@sjfc.edu.

Sincerely,

[Signature]

Faulkner M. Merget, Ph.D.
Chair, Institutional Review Board

3696 East Avenue • Rochester, NY 14614 • 585-385-8900 • www.sjfc.edu
Form A
St. John Fisher College
Institutional Review Board

Decision of Institutional Review Board

Reviewed by: [Signature]

Subcommittee Member: [Name]

Date: [Date]

Approved

Not Approved

Comments:

No Research: The proposed project has no research component and does not need to be in further compliance with Article 24-A.

Minimal Risk: The proposed project has a research component but does not place subjects "At Risk" and need not be in further compliance with Article 24-A.

Research & Risk: The proposed project has a research component and places subjects at risk. The proposal must be in compliance with Article 24-A.

Chairperson, Institutional Review Board: [Signature]

Date: [Date]

Rev. 12/2000
Appendix B

City Central School District Approval

February 14, 2012

RE: Approval for Study

Dear Ms. Mascitti-Miller:

This letter serves as formal District approval for your proposed study, *Resource Allocation: Best Practices in Urban Elementary Schools*, in satisfaction of your dissertation. Please feel free to share this letter with your IRB and any other appropriate parties.

With between 100 to 120 research and survey requests the District receives every year, requirements for District approval must be rigorous. Any request must directly benefit our students, their families, District teachers and leaders. It must be supportable by the schools and departments involved. Alignment with the Superintendent's Goals is preferred as well. Your proposed study satisfies each of these requirements.

We wish to support your work as you need. Please continue to work with the Office of Accountability's designee for your proposal; please feel free to contact me at any time if I can be of assistance. Please note that we may ask you to present your findings in some of our public formats at a future date, for example, the District's Annual Symposium.

We are most eager to see your study completed. We wish you the best of luck to you in the coming months.

Very truly yours,
Appendix C

Data Set and Origins

This quantitative study used data gathered from a large urban school district in upstate New York. The urban district chosen for this study possessed the characteristics that often describe urban school districts including high poverty, large achievement gaps, and low graduation rates (Tough, 2008). The Central City School District (CCSD) chosen for this study is located in upstate New York and serves approximately 32,000 students in 62 schools including 39 elementary and 23 high schools. According to the 2010 Basic Education Data System (BEDS) district report, the student population is comprised of 64% African American, 22% Hispanic, 10% White, and 3% other. Approximately 85% are eligible for free or reduced lunch. In addition, 17.6% are classified as Students with Disabilities, and 10% are English Language Learners, which includes Spanish speaking bilingual students and students from foreign countries.

Schools used for this study were selected from a list of all elementary schools in the CCSD from the 2009-2010 school year. The participants were selected by size of student enrollment, ethnicity distribution, proportion of Students with Disabilities and English Language Learners, and the number of students tested grades 3-6.

All school selection data was gathered from the district’s Office of Accountability and the 2009-2010 New York State School Report Cards. All financial data for this study was obtained from the Office of Finance in the CCSD. Effective data collection practices, including the identification of sources and methods for data collection were used.
(Fitzpatrick, Sanders, & Worthen, 2011), and research instruments were valid and reliable (Cottrell & Neugerg, 2005; Creswell, 2009).