Teacher Perceptions of the Factors That Influence Support for an Adequacy Model of School Funding

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Teacher Perceptions of the Factors That Influence Support for an Adequacy Model of School Funding

Abstract
This study sought to determine teacher perceptions about the factors that influence support for an adequacy model of school funding and what relationships exist between specific demographic variables and those perceptions.

Using the instrument created for the study, one hundred thirty-nine teachers from the Montrose RE-1J School District where surveyed. Data was tabulated using standard descriptive statistics (mean, standard deviations, frequencies, and percentages). As a general data analysis approach, bivariate comparisons were performed using Pearson correlations and t-tests for independent means. Multiple regression prediction equations were used to examine the relationships between specific demographics and teacher perceptions of the factors that influence support for an adequacy model of school funding.

The key findings were (a) teachers seemed to support the concept of adequacy but are less likely to support the concept when tradeoff issues are introduced; (b) teachers viewed the local level of government more positively than the state or federal levels; (c) teachers identified the state level of government as having the greatest ability to provide additional funding to districts with the neediest students; (d) teachers named the legislative branch of the government as best equipped to make funding decisions regarding the adequacy of school funding systems; (e) teachers with a more liberal political point of view were less affected by the concept of localism as a means of separation and were comfortable with judicial involvement in deciding issues of adequacy; (f) teachers who would be the most willing to share are those that teach at the elementary level, have earned a master's degree, do not own property in the district in which they teach and have more liberal political views; and (d) with the fair distribution system factor, it can be predicted that those with higher household incomes and those with more liberal political views will be more supportive of an adequacy model of school funding.

If the concept of school finance reform is conceptualized as a triangular interaction between the courts, the legislature, and the public, this study focused on the teacher as a member of the public by identifying teacher perceptions of factors that influence support for adequacy models of school funding as well as identifying those teachers who might be the best candidates for grassroots advocacy groups that develop a greater capacity of understanding regarding funding issues, could agree on solutions, and could devise strategies for realizing the policy changes that benefit the neediest students.

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TEACHER PERCEPTIONS OF THE FACTORS THAT INFLUENCE SUPPORT FOR AN ADEQUACY MODEL OF SCHOOL FUNDING

A Dissertation
Presented to
The Morgridge College of Education
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Nancy L. Alex
August, 2010
Advisor: Dr. Kent Seidel
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Chapter 1

“What the best and wisest parent wants for his own child, that must be what the community wants for all its children” (Dewey, 1899/1900, p. 3).

Public education is a critical aspect of the democratic nature of the American experience. Americans believe in the value of education, view it as a social and economic equalizer of citizens, and acknowledge that not all citizens have been able to access the system in the same manner (Shelley, 2004). Without equal access to education, a well-documented achievement gap persists between disadvantaged children and their more advantaged peers (Reeves, 2007; Slavin & Madden, 2006). The public recognizes the injustice, supports narrowing the achievement gap, and finds lessening the difference between the powerful and the powerless appealing (Phi Delta Kappan, 2003). Closing that gap, however, does come at a price, and Americans have clearly stated that they are willing to increase support of public education if they are “confident money will be spent efficiently, effectively, and without waste” (Hart & Teeter, 2004, p. 8).

Although the public appears to support the funding of education, the equality and equity of that funding has long been at issue; and, as Reed (2001) pointed out, Americans claim equality to be central to the American ethic, but they are willing to tolerate dramatic social and economic inequalities. Nowhere is that more evident than in the struggle to publically fund education.
As one would expect then, school funding is complex, multi-faceted, and engages countless competing interests. It was the purview of this study to define and build a case for a particular model of school funding known as *adequacy* and through an examination of current literature, to identify factors that could influence support for the adequacy model. The perceptions of those factors by teachers were the target of the survey research. With an enhanced understanding of the insights that teachers held regarding these support factors, the greater the potential for advocacy and the building of campaigns to increase public awareness and develop strategies to target themes that foster support for adequacy funding.

**Historical Background**

Historically, funding for public schools has been concentrated at the state and local levels because the United States Constitution delegates to the states the power to provide public education. The revenue necessary to build or maintain schools has traditionally come through the collection of local property taxes. Since the federal government has a limited role in funding, states are left with the task of creating laws and regulations that govern the collection and distribution of funds to individual school districts. These taxes are based on the assessed value of local property. As a result of varying property values among districts, significant funding disparities between districts have developed. Those districts with high assessed property value are more able to raise revenue and consequently able to fund schools at a higher level than property-poor districts, even after levying higher property tax rates. This is a pattern that inherently disadvantages students who attend schools in areas with low property wealth.
The public, over time, has sought to remedy funding disparities and has done so through waves of litigation that has evolved from a focus on equality to equity to adequacy (West & Peterson, 2007). Initially, litigation revolved around issues of equality and segregation. The landmark case, *Brown v. Board of Education* (1954) sought to abolish the notion of *separate but equal* and to ensure equal treatment of all students. This litigation paved the way for equity court cases or the first wave that occurred during the late 1960s and early 1970s, during which state legislatures and the courts sought to make the distribution of funds more equitable across districts and schools (Olsen, 2005). One of the earliest cases occurred in California in 1971. *Serrano v. Priest* (1971) sought to remedy disparities in school district funding resulting from unequal property tax valuations. Plaintiffs challenged the disparate systems arguing a constitutional violation of the federal equal protection clause of the Fourteenth Amendment. The court ruled in favor of the plaintiffs and held that education was a fundamental right under the California and U.S. Constitutions (Patt, 1999). Other cases attempted to ride on the coattails of the successful *Serrano* case. In 1973, plaintiffs in *San Antonio Independent School District v. Rodriguez* argued that the state’s funding system violated the equal protection clause of the U. S. Constitution because of its reliance on local property wealth and therefore discriminated against children from low-property wealth districts. The state ultimately prevailed, with the U.S. Supreme Court declaring that education is not a “fundamental interest” guaranteed by the federal government. The Texas school funding system was found constitutional even though the disparate conditions were acknowledged (Sweetland, 2000).
With the difficulty of convincing the courts that disparate systems were unconstitutional, reformers took a different tact and initiated the second wave of school finance litigation. The 1973 case *Robinson v. Cahill* shifted to using states’ educational clauses as the basis for seeking remedy from extreme disparities in the quality of education among school districts (West & Peterson, 2007). Because most state constitutions call for thorough and efficient school systems, the burden to ensure fiscal neutrality belongs to the state (Olsen, 2005). The quality of schools and systems, then, should not be directly linked to the level of property value (Reyes, 2004). The education clause was evidence that the public had an enforceable right to equal educational opportunity. The system was therefore declared unconstitutional because it relied on property tax revenue, which created disparities across districts. The low property wealth districts, as a result of the disparities, were deficient in their ability to deliver adequate educational opportunities (Guthrie & Springer, 2007).

While school finance litigation continued in the courts, the country was influenced by the federal report, *A Nation at Risk* (1983), which declared that the educational system had eroded to a state of mediocrity. With this report as the catalyst, a number of significant reforms such as the introduction of standards, high-stakes accountability, and teacher accreditation were established. It is at this point that school finance litigation and school reform advocates, partnered as plaintiffs, focused their attention on sufficient resources necessary to achieve these new mandated state standards. The standards movement was the impetus for the third wave of school finance litigation centering on educational adequacy.
As states grappled with implementing reforms that required more funding, it was evident that some districts would struggle more than others to successfully carry out changes (West & Peterson, 2007). A property-poor district in Kentucky became the first to challenge the state for sufficient funding to implement the newly ordered reforms. Successful plaintiffs in *Rose v. Council for Better Education* (1989) argued that Kentucky’s educational system was unconstitutional based on the gross inequity of resources across the state and that the state had generally provided insufficient level of resources. This decision supported claims that in order for districts to meet state standards, states would have to provide them with adequate resources to ensure student achievement (Reed, 2001).

**Inputs vs. Outcomes**

In order for the courts to move forward with adequacy litigation, advocates needed to establish that there was a significant link between resources and intended student outcomes. *Resources or inputs* are defined as dollars necessary to purchase equipment, labor, and buildings, as well as the dollars needed to establish course offerings, curricular content, or events that happen within the classroom (Berne & Stiefel, 1999). *Outcomes* suggest results such as student achievement as defined by high-stakes assessment, graduation rates, or lifetime income earnings.

To understand the relationship between inputs and outcomes, it is important to recognize that inputs and outputs vary significantly in schools and districts across the country and are largely split along racial and economic lines with “75 percent of Latino and over 70 percent of African-American public school students attending predominately
minority schools” (Rebell & Wolff, 2006, p. 5). These low-income and minority students, who consistently come to school with fewer educational experiences such as preschool and have greater educational needs, encounter schools that consistently employ fewer experienced and well-educated teachers, have a narrower and less rigorous curriculum, and have facilities that are of the lowest quality (Education Trust, 2006, p. 1). This pattern is repeated again and again in high-poverty, high-minority schools.

Since teacher quality, curriculum, and facilities are all examples of inputs that vary significantly between high and low wealth districts and between districts with high and low percentages of minority students, it can be argued that a funding gap exists. In fact, an analysis by the Education Trust (2006) found that across the country, state and local funds provided $825 per student less in districts with the highest poverty as compared with the most affluent districts. This same trend is evident for districts that educate the largest number of minority students, with 28 states out of 49 (the state of Hawaii is one district) providing $908 per pupil less to high-minority districts as compared to those districts with low-minority populations.

Not only are there funding disparities between schools and districts that serve high populations of low-income and minority students and those that don’t, there is a significant divide that falls along achievement lines as well. According to the 2006 National Assessment of Educational Progress (NAEP), African-American and Hispanic students consistently score below their white counterparts in reading and math at both the fourth and eighth grade levels. At the high school level, African-American students drop out of high school at a rate of 5.7% compared to white students, who drop out at a rate of
3.7%, whereas Hispanic students have the highest dropout rate at 8.9%. The dropout rate for students living in low-income families was approximately four times greater than the rate of their peers from higher income families (National Center for Educational Statistics, 2006).

Although the former represents national statistics, Colorado’s statistics mirror the trend. According to the 2007 Colorado Student Assessment Program (CSAP) exam of fourth grade reading, 48% of African-American, 44% of Hispanic, and 78% of white students were “at or above proficient.” For eighth graders, 50% of African-American, 45% of Hispanic, and 78% of white students scored “at or above proficient,” (CSAP, 2007). The dropout rate for African-American students in Colorado is 5.5%, 2.4% for white students, and 6.6% for Hispanic students (Colorado Department of Education, 2007).

There have been decades of debate on how best to reform the educational system; many of those reforms have been linked to funding and attempting to document the relationship between school expenditures and student achievement (Greenwald, Hedges & Laine, 1996). The original debate between expenditures and achievement began over 40 years ago with the infamous Coleman Report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld et al., 1966), which found that school funding did not matter as student achievement was determined by characteristics of the students’ home background as well as characteristics of the other students in the school. In other words, school had little if any effect on the achievement of students when home and peer factors were controlled. Since the Coleman Report, two lines of thinking and research have
emerged on the topic; one side argues there is no significant relationship between spending and achievement, whereas the other side maintains that increased expenditures do make a difference in student performance. Over the past 25 years, Hanushek (1981, 1986, 1989, 1991, 2003) has synthesized and conducted much of the education production research and asserted that “there is no strong or systematic relationship between school expenditures and student performance (Hanushek, 1989, p. 47).

Contrasting sharply to Hanushek’s argument are Greenwald, Hedges, and Laine’s (1996) assertions, who concluded after conducting their own meta-analysis of education production function studies that the relationship between inputs and student outcomes were positive and large enough to be a factor in educational policy making.

More recently, studies (Archibald, 2006; Reichardt, 2001) have confirmed the positive relationships between school expenditures and student achievement. Expenditures in these studies can be grouped together into three broad categories: teacher quality, school characteristics, and instructional decisions.

Teacher quality, although difficult to define, is primarily concerned with teacher ability, education, and experience (Greenwald et al., 1996). Reichardt (2001) described teacher quality as the ability of the teacher to work with students to ensure they can meet high standards. Findings have established that teacher quality, an expenditure, is positively related to student achievement (Archibald, 2006; Ferguson, 1991; Greenwald et al., 1996; MacPhail-Wilcox & King, 1986; Milanowski, 2005).

School characteristics are identified as those traits that create a positive social environment within the school (Wenglinsky, 1997). School size, class size, teacher-
student ratio, and academic climate are all attributes that help define that social environment (Berliner & Biddle, 1995). Again, the findings for these kinds of expenditures have been positively related to student achievement (Archibald, 2006; Chubb & Moe 1990; Ferguson, 1991; Finn & Achilles, 1990; Greenwald et al., 1996; Grissmer, 1999; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979; Wenglinsky, 1997).

The last set of expenditures that has been reported to have a positive effect on student achievement is that of instructional decisions. The number of academic courses, the availability of a specialized academic program, and the level of expenditure on classroom resources have all shown to have a statistically significant impact on achievement (Chubb & Moe, 1990; Elliott, 1998).

**Adequacy Costs**

As the concept of adequacy is applied to expenditures, the cost of delivering a predetermined level of education is either an actual cost or is relative to the differing costs necessary to deliver the education to students with varying special needs or in varying contexts (Baker, 2005). This notion of educational cost being dependent on student or school characteristics can be traced back to a well-known article by Bradford, Malt, and Oates (1969), which suggested that the cost of providing public services was dependent on the environment in which those services were provided. This same thinking has now been applied to educational costs and the concept of adequacy.

Baker (2005) suggested that there are three primary ways in which costs vary depending on district size, desired student outcomes, and student need. The size of the
school or district has been associated with production and the cost of achieving specific outcomes (Andrews, Duncombe, & Yinger, 2002; Baker, 2005). Economies of scale do exist in education and cause the cost of producing desired outcomes for smaller districts to increase.

Another factor affecting cost is the level of student outcome desired. In other words, as achieving higher average student outcomes increases so does the cost associated with achieving those outcomes. It costs more to educate students to a higher outcome (Duncombe & Yinger, 1999; Reschovsky & Imazeki, 1997, 2001).

Lastly, and most importantly for this discussion, is the varying cost of achieving desired student outcomes with students of varying needs. At-risk factors, for example, the percentage and degree of children living in poverty, the percentage of students with disabilities, and the percentage of students with limited English language proficiency have all been identified as factors that increase the cost of achieving desired student outcomes (Alexander & Salmon, 1995; Duncombe, Ruggiero, & Yinger, 1996; Duncombe & Yinger, 2004). It appears to simply cost more to educate at-risk students.

Recognizing that at-risk students face significant challenges in meeting specified student outcomes and that the cost to educate at-risk students is more than what is necessary to educate a typical student, states have attempted, in varying ways, to implement funding policies that divert additional resources to districts on the basis of poverty (Carey, 2002). Many states have developed a funding “weight” that is used in the calculation of enrollment levels. These weights, some times referred to as formula add-ons, function in the following way: Each student is valued at a 1.0. Students with
specific at-risk characteristics are then given an add-on value or funding weight that is added to the base value. For example, a student who qualifies for the federal free and reduced lunch program is given an add-on value of 17% or .17 added to the base funding value of 1.0. For each at-risk student then, the district receives 17% more funding (Carey, 2002). Across the country, these at-risk weights range from 10% to 100% more per-pupil funding to compensate education programs for at-risk students. The most common weight appears to be in the range of 20-25%. Specifically for Colorado, “for each at-risk pupil, a district receives funding equal to at least 12 percent, but no more than 30 percent, of its Total Per-pupil Funding” (Understanding Colorado, 2008, p. 4).

Although it would appear that states are making an effort to adjust funding formulas to reflect the higher cost of educating at-risk students, the poverty weightings are not grounded in research and often appear ad hoc in nature (Alexander & Wall, 2006). Furthermore, even if states have increased weightings, there is little evidence that the increase is appropriate to produce the desired student outcomes (Alexander & Wall, 2006). States have used historical funding patterns (Figlio, 2004; Rothstein, 2005) or have simply based estimates on what other states have instituted (Guthrie, 1997) as a means for determining the costs of providing programs for disadvantaged students. Taken as a whole, the cost differentials used by states to increase funding for at-risk students seems to be quite low, with conventional school finance literature estimating the increased cost of such programs to be 20% (Rothstein, 2005). Even though states recognize the need to increase funding for at-risk students, funding formulas continue to provide a relatively small adjustment based on questionable estimates. What, then, does
research say about the cost of educating students who are at-risk? Although studies concerning the relative costs of educating at-risk students are not absolute, the research would suggest the additional costs to be between two and three times the cost of educating average students (Duncombe et al., 2003; Reschovsky & Imazeki, 2000; Verstegen, 2003).

**Societal Investment**

What are the likely consequences of not increasing funding for at risk students? Is the cost of spending more money on at-risk kids worth the investment? If the assumption is that money matters to student achievement and more money is needed to bring at-risk students to a desired level of proficiency, one could argue that not funding in this manner will continue to perpetuate the achievement gap that exists in our country today. The consequences of the achievement gap will be costly at both the individual and national levels (McKinsey, 2009). For the individual, underachieving can lead to the poor and minority student facing a future of high unemployment, low wages, lower lifetime earnings, poorer health, and higher rates of incarceration (Levin, 1989; McKinsey, 2009; Moretti, 2007). On a broader level, since educational attainment has been linked with civic engagement (Carnoy & Levin, 1985; McKinsey, 2009), then as the at-risk population becomes a voting majority, the potential of having an electorate not well prepared to grasp important issues could be problematic.

The achievement gap has significant economic costs as well. By not developing the potential of at-risk students, the workforce on average is “less able to develop, master, and adapt to new productivity-enhancing technologies and methods” (McKinsey, 2009, p.

If the gap between black and Latino student performance and white student performance had been similarly narrowed, GDP in 2008 would have been between $310 billion and $525 billion higher. If the gap between low-income students and the rest had been similarly narrowed, GDP in 2008 would have been $425 billion to $700 billion higher. (pp. 5-6)

McKinsey (2009) continued, “Put differently, the persistence of these educational gaps imposes on the United States the economic equivalent of a permanent national recession” (p. 6).

**Resistance to Adequacy**

The case for adequacy as a model of school or district resource distribution can be developed on the following concepts: (a) courts have favored adequacy litigation; (b) resources do matter, particularly for at-risk students; (c) states have attempted to account for the increase in cost necessary to educate at-risk students; and (d) the consequences for not increasing funding for at-risk students will have significant individual and economic repercussions. Even with this line of logic, however, resistance to the model exists and seems to fall along two distinct lines: academic and public resistance.

**Academic resistance.**

The resistance within the academic world stems from the continued debate over the relationship between resources and student performance. Scholars point to studies indicating historical spending has indeed increased, but with no real improvement in
academic performance (Berliner, 1995). Hanushek’s (1989) review suggested “there is no strong or systematic relationship between school expenditures and student performance” (p. 47). Further analysis would offer that nearly 10 years after the original study, schools continue to exhibit no strong or consistent relationship between inputs and outcomes (Hanushek, 1997). One of Hanushek’s criticisms is that costing-out methods that attempt to determine the cost of providing the necessary education in order to achieve a desired outcome may not represent actual costs as they are not grounded in any clear or consistent link between school expenditures and student performance.

Public resistance.

Outside academia, a different kind of resistance to the concept of adequacy is evident. Causes of resistance can be grouped together as either constitutional concerns or societal concerns. Constitutionally, there are those who feel it is appropriate for courts to become actively involved in overseeing important elements of a democratic community, whereas others raise questions about the separation of powers between the judicial and legislative branches (Heise, 1982). Because adequacy lawsuits can be seen as political events in which resources of value are being allocated, they force the courts into an arena that has been specifically designated for the legislature, that is, to raise revenue and appropriate funds. In fact, disgruntled legislators in Kansas have attempted constitutional amendments to protect this prerogative and bar the courts from ordering it to make specific appropriations (Dunn & Derthick, 2007). Opponents would argue that the electorate must be able to “petition their local representatives, instead of seeking redress from a relatively remote court system” (Starr, 2007, p. 314).
If the courts are the first line of defense, questions can be raised about the courts’ expertise in the complexities of educational reform. According to Breyer (2002), the “judiciary deals with a wide range of issues and has neither the time, institutional capacity, nor resources to become fully equipped to formulate, implement, and then manage a system that would ensure ‘adequate’ education” (p. 250). Because the education clauses in state constitutions range from a simple order of a free education to a mandate of an education of specified quality, the courts have often found it difficult to find specific standards that it can impose on legislatures (Dunn & Derthick, 2007). In other words, education clauses are so vague as to make judicial standards nothing more than the courts’ own preferences. With the courts potentially altering policy decisions made by the legislature based on wide interpretation of constitutional language, the risk of undermining the participatory nature of a representative government is evident (Eastman, 2007).

Apart from constitutional questions surrounding adequacy, societal or public concerns shape further resistance to the model. First is the notion of local control. Americans have experienced a long history of utilizing local property taxes to fund education. Because variations exist in property value, tax rates, and other municipal costs, communities differ in their ability to raise revenue to support education (Carr & Fuhrman, 1999). In short, affluent communities are able to tax themselves at a higher rate to finance education, whereas impoverished communities, with fewer resources, have little to contribute to local districts and schools (Berliner & Biddle, 1995). The historical context of decisions concerning everything from finance to facilities has been made at the
local level, and as those decisions regarding school finance move to the state levels, discomfort within communities grows (Carr & Fuhrman, 1999). Localism seems to matter in issues of school finance reform and several factors may be at play. One is that people appear to appreciate the virtues of small-scaled democracy, whereas another factor may see the control of local issues as a means to maintain suburban separation (Gainsborough, 2001; Shelly, 2007). By controlling boundaries, more affluent communities can avoid paying for services for the less affluent and minimize social welfare spending.

**Teacher Advocacy**

Even though public resistance to adequacy models of funding exists, teachers, as a subset of the population, have the potential to advocate for financial reform. Their voices can and should be a part of the debate. However, one could argue that teacher organizations, specifically unions, have not traditionally lobbied for issues of educational reform, but rather have focused on dispute resolution between labor and management, membership interest, and the protection of the status quo. With that historical perspective, the assumption that teacher unions want to become activists of school reform is likely incorrect. However, in 2007, the Newark Teachers Union joined forces with Newark, New Jersey, school officials as well as representatives from a local university to create a governing body responsible for the daily operations of one of the lowest performing schools in the area (Hu, 2007). This represented a significant shift in how union leadership perceived their work and their ability to establish a new role that sees teacher unions as a necessary component in the school reform debate.
With the adjusted union perspective, “teacher interests and educational needs of children are not viewed as incompatible, but in fact, intertwined (Carini, 2002, p. 104). As unions move from “industrial contracts” to “reform contracts,” the emphasis is on teacher performance (Brookings Institute, 2000). If teachers were successful in supporting the notion of adequacy models of school funding, this, along with enhanced teacher performance, could spell significant improvements in student achievement.

The power of teacher unions is recognized as being so influential that many contend they have considerable weight at all levels of government. The thinking would follow then, since they have such influence, even at the state level, and the shift within unions is occurring to focus on issues more relevant to school improvement, the time may be right for teachers to be more active in the debate surrounding school finance reform. They may no longer be able to leave educational problems to management or the legislature to solve, but rather assume responsibility for solving those problems as part of a shared effort with other professional educators and policy makers (Ravitch, 2006, 2007).

**Problem Statement**

Although some national polls have been conducted on the subject of equity/adequacy models of funding, considerably less is known at the state level (Shelly, 2004), and Colorado is no exception. The state has conducted an adequacy cost study and has collected some data on public opinion of successful schools, which was used to create a clearer vision of funding, but little data has been collected from stakeholders within the state. Stakeholders of interest in this case are teachers. This study sought to
determine teacher perceptions about the factors that influence support for an adequacy model of school funding. A more specific purpose, related directly to the value of the study, was to create credible findings from the data at a state level about teacher perspectives that could be used to inform public policy since teachers have the potential to build campaigns to increase public awareness and develop strategies to target themes that foster support for adequacy funding. Historically, social change has occurred not from a widespread public uprising, but rather from pressure applied to political decision makers by well organized and articulate advocacy groups. Focusing the attention in this study on teachers allowed for a clearer understanding of their perceptions of the factors that influence support for the model and consequently could be used to shape the debate among advocates.

**Research Questions**

1. What are teacher perceptions about the factors that influence support for an adequacy model of school funding?

2. What relationships exist between specific demographic variables and teacher perception about the factors that influence support for an adequacy model of school funding?

**Delimitations**

The study was conducted during the 2009-2010 school year and surveyed 150 teachers from a rural Colorado school district. The purposeful and convenient sample included elementary, middle, and high school teachers.
Definitions


2. School finance: process involved in providing revenue to local public school districts.

Organization of the Study

The study is organized into five chapters, a bibliography, and appendixes. Chapter Two presents a review of the literature focusing on specific aspects of an adequacy model of funding and outlines factors that influence support for the model. Chapter Three outlines the research design and methodology of the study. Data analysis is contained in Chapter Four, whereas Chapter Five consists of the summary of key findings followed by recommendations.
Chapter 2: Review of Literature

Adequacy Defined

In its very simplest form, the distribution of resources is either equal or unequal. Equality of resources seems inherently “fair,” but should conditions require that resources be unequally distributed, questions arise. Who gets more? Who decides? How much more? Although they sound exceedingly philosophical, these are the same questions raised by the concept of educational adequacy as a model of school funding. Being different from equality or equity, adequacy seeks to shape school finance by shifting the focus away from equal treatment for all to unequal treatment based on specific need (Minorini & Sugarman, 1999).

In order to appreciate the difference between adequacy and equality, one must understand that sufficiency has been a topic of discussion for decades among the philosophers (Anderson, 1999; Rawls, 1971). Several principles under the umbrella of distributive justice could be at the root of the adequacy debate. How are resources distributed? Is there a fairness to that distribution? Does the distribution have anything to do with outcomes? The equality principle strictly adheres to an absolute equal allocation of resources, whereas the need principle addresses the allocation of resources according to the recipient’s individual needs (Schwinger & Lamm, 1981). If we compare these two principles using concepts of equality and adequacy, the main conceptual
difference between the two is that equality is based on either a comparative or a relational perspective whereas adequacy is not (Reich, 2006). For example, does student A have as much as student B? Does teacher A produce outcomes equal to the outcomes produced by teacher B? In order to answer these questions of equality, a strict comparison is necessary. Asking if school A is sufficient or adequate requires a completely different perspective. To answer this question, no comparison of groups is necessary, but rather a focus on the standard of sufficiency.

It would seem, then, that adequacy has no relational component, but in fact, a standard is dependent on the context and the time in which it was developed (Reich, 2006). For example, the standard of sufficient transportation in a third world country would be significantly different than in the United States. Even within the United States, an income necessary to live comfortably in a rural setting is appreciably different than an income necessary to live comfortably in a resort community. A sufficient education from the 19th century would not be considered sufficient by today’s American standard. Adequacy, having a somewhat relative nature, is important in the policy debate and generates discussion around what standards will be used as the benchmark against which performance will be evaluated.

If standards are established, the next question becomes how are resources distributed to ensure attainment of the standard? Equality in school finance has historically been focused on the inputs of the system; the things that money can buy—facilities, teachers, class size, teaching, and learning materials. Adequacy has altered that focus to outcomes, which have been primarily represented as student achievement. What
amount of spending is necessary to achieve certain educational outcomes? Both adequacy and equality are concerned with the improvement of outcomes, but as long as an achievement gap exists, equality of outcomes is elusive (Reich, 2006).

In its base form, adequacy seeks to ensure that all students have enough of a quality education that provides them with the essential skills necessary to function in a contemporary society. Interestingly enough, if the standard of a quality education were to be met by all students, inequalities in resource allocation would be acceptable. For example, if the benchmark has been established in two very different socioeconomic districts by preparing all students for postsecondary experience, whatever that may be, adequacy has been achieved. In order to accomplish this condition, more resources were channeled to the lower socioeconomic district. Adequacy has been accomplished, but equality has been offended. On the reverse side, the affluent district may decide to increase its tax rate and spend more on its students in order to provide advanced offerings. Again, adequacy had been achieved, but equality had been defied. Adequacy, therefore, is concerned with outcomes evaluated against a standard, but may require unequal distribution of resources in order to ensure the standard has been met.

It is assumed that equality reforms are more costly than adequacy reforms as they imply a leveling up and require the state provide every district the same level of resources being spent by the highest-spending district in the state. Adequacy may, in fact, require even more of a fiscal demand than equality because if a state identifies the standard or desired outcomes and sees to it that students have the resources to achieve the standard,
then the cost to educate the most at-risk students will be considerably more than the cost of educating typical students (Baker, 2005).

The objects of distribution, inputs for equality and outputs for adequacy, have been discussed, so now the conversation turns to how those resources can be distributed. There are three basic principles of how resources can be distributed among groups or individuals. First, horizontal equity speaks to the equal treatment of students irrespective of need. In other words, equally situated students should be treated equally. When looking at horizontal equity, researchers have traditionally placed students into specific groups such as general education, at-risk, and special education students. The inputs when looking across these groups are not difficult to recognize. For example, do students within an at-risk group have the same degree of inputs along their educational experience as other at risk students? When outputs are considered under horizontal equity, it is much more difficult to determine because group differences are not used to justify different outcomes. Maybe the idea of sufficiently high standards for all is a more appropriate concept for outcomes than horizontal equity (Berne & Stiefel, 1999).

The second principle of distribution is vertical equity, also described as “equity plus” (Berne & Stiefel, 1999; Briffault, 2007), which, in its simplest form, calls for students who are situated differently to be treated differently. Vertical equity can be more easily tied to both inputs and outcomes. In theory, inputs are adjusted and represent the additional costs necessary to educate certain students to the desired outcome. Vertical equity forms the basis for arguing that if additional resources are needed in certain districts in order to provide special groups of students with an adequate education, then
funds must be provided. Certain students, being in some way more at-risk, are simply more costly to educate to the desired outcome. That at-risk nature can come in the disadvantages brought on by poverty, disability, or degree of English acquisition. The bottom line with vertical equity is those who need more get more, and this reinforces the goal of equal opportunity designed to provide an equal outcome for all students.

Wealth or fiscal neutrality is the third means by which to distribute resources. This method requires no differences in input or outcomes that compensate for factors such as school district wealth, geography, location, race, or gender (Reich, 2006). In other words, “wealth neutrality specifies that no relationship should exist between the education of children and the property wealth that supports the public funding of that education” (Berne & Stiefel, 1999, p. 16). A student’s education should not be dependent on the property wealth of his/her neighbors.

So the question of whether adequacy or equality is the best framework for reform is left for the public and policymakers to decide and comes down to the responsibility of the state for providing education. For adequacy to be the correct framework, responsibility of the state would end when an acceptable standard and adjustments in spending that reflect increased costs of educating certain students are established. For equality to be the more desirable framework, the state’s responsibility would be to ensure equal funding for all students.

With the more theoretical definition of adequacy understood, it may be beneficial to explore how the courts and the legislature each define adequacy.
Because the courts rely on education clauses in state constitutions as the standard upon which they make determinations of adequacy of a state’s school funding system, having a consistent definition built into the state clauses would be extremely advantageous. Unfortunately, the education clauses across the nation range from a simple order of a free education to a mandate of an education of specified quality. As a result, the courts have often found it difficult to find specific standards that it can impose on legislatures (Dunn & Derthick, 2007). In other words, education clauses are so vague, that to develop a judicial standard requires a combination of the clause itself and the court’s interpretation of the clause obtained by the application of its conventional knowledge about what constitutes a quality education today.

Another means by which the courts have chosen to define adequacy is through the use of standards. The legislature has adopted content standards in every state, and by default, those standards have established what a quality education should look like. With the implementation of state-wide assessments and the advent of No Child Left Behind with its rich data reporting, the courts have found ample evidence to evaluate the adequacy of educational systems. By using a more quantitative method, the courts are able to analyze the inputs and make a determination as to whether the outputs are representative of an adequate education.

Historically, the state legislature has been responsible for funding public schools through the creation and regulation of laws that govern the collection and distribution of funds to individual schools and districts. The dollars that are allocated to districts represent the legislature’s definition of adequacy and can be summed up as the per-pupil
funding distributed to each district. The disadvantage, here, is that the per-pupil allocation is a number based on political maneuvering and does not likely represent the actual cost of educating all students to the desired outcome. In order to raise revenue for per-pupil funding, taxes are levied based on the assessed value of local property. As a result of varying property values among districts, significant funding disparities between districts are evident. Those districts with high assessed property value are more able to raise revenue and consequently able to fund schools at a higher level than property-poor districts even after levying higher property tax rates. This is a pattern that inherently disadvantages students who attend schools in areas with low property wealth. This discriminatory method of revenue collection only enhances the argument that funding following this design is insufficient to ensure all students are provided with an equal opportunity to meet desired outcomes.

**Standards and Adequacy**

No matter where one looks in education today, standards of some kind dominate the educational landscape. There are content standards, standards-based instruction and grading, professional standards for teachers, and discussions about standards happening from the local to the state and to the national level. Although the nature of education today is standards focused, standards have not always existed and certainly have not always commanded our attention as they currently do.

An understanding of the development of the standards-based movement is critical to recognizing how adequacy has become an important dimension of school funding. The standards movement can be traced back to the 1983 national report, *A Nation at Risk*,
which was pivotal in raising national awareness to the crisis of failing public schools. It asserted that schools were at best mediocre and made a strident call for raising the expectations for schools and students alike by mobilizing public support for reforms. The initial recommendations from the report sought to strengthen graduation requirements, adopt more rigorous and measureable standards, devote more time to instruction, and interestingly enough, sought to hold elected officials responsible for providing fiscal support.

By the late 1980s, concerned by the ineffectiveness of initial reforms, President Bush along with the nation’s governors established six goals published under the title *The National Education Goals Report: Building a Nation of Learners* (National Education Goals Panel [NEGP], 1991), which addressed the academic achievement of America’s students. The following year, Congress established the National Council on Education Standards and Testing (NCEST), which along with the NEGP was charged with addressing the never before asked questions about standards. They attempted to formulate answers about what subject matter should be taught, how that subject matter should be assessed, and what would indicate a proficient performance. Without question, their work had a significant impact on national subject-matter organization that began diligent work surrounding the identification of standards in their own disciplines (Marzano & Kendall, 1996).

The standards reform was grounded in significant subject areas such as English, math, and science. The National Council of Teachers of Mathematics (NCTM) was a forerunner in the creation of content standards as it wrote and published the *Curriculum*
and Evaluation Standards for School Mathematics in 1989 before the mandate was handed down requiring all content disciplines to formulate standards. Over time, other professional subject matter organizations began to use the NCTM standards as the benchmark for the development of their own content standards (Lewis, 1995). The work of these organizations moved them from a rather insignificant role in public policy to one of prominence within the standards movement (Myers, 1994). The work of these professional organizations included the voices of many professionals in the field by requesting and encouraging feedback about the standards as they progressed through the process. Educational professionals served an important role in the standards reform effort.

Once standards were developed and certified as required by the Educate America Act, Goals 2000, just about every other area of education needed updating. In order for teachers to teach effectively to the standards, enhanced teacher training was necessary. With the new standards, texts and other materials needed revision and updating, and student assessment was developed as a means to measure implementation of the reforms (Rebell, 2002).

From the intense national debate over standards and accountability testing came the notion of opportunity to learn standards (OTL), a topic that has relevance today. The basic tenet of the standards-based reform movement is that all students are capable of achieving at high levels if given the appropriate resources that represent a genuine opportunity to learn (New York Board of Regents, 1993). In order to ensure that students are given an equal opportunity to learn, they must have exposure to quality teachers who
are explicitly trained in specific content, a broad and challenging curriculum, and high quality materials and facilities (NCEST, 1992).

As the development of standards and assessments continued, OTL standards became significant as the educational bar was raised throughout the country. The concern was: If students were not exposed to high quality schools, materials, and instruction, could they be held responsible for failing to reach content standards? OTL standards were designed to protect students from just such an event: “a proper response to counteract the negative effects of the high-stakes testing on at-risk students who happen to attend inferior or low-performing schools” (Porter, 1995, p. 21). Not providing students with an equal opportunity to learn could in fact cause the gap between advantaged and disadvantaged students to widen.

The bottom line with OTL standards is that in order to assure that students have an equal opportunity to reach the high expectations of content outcomes, students must have not only equal access to the inputs or resources, but those resources must be used in such a way as to promote achievement (Elmore & Fuhrman, 1993). Much like the concept of adequacy funding that would come some years later, OTL standards had an equal focus on outcomes. These standards sought to establish a measure of the adequacy of the funding available at each school that was designed to help all students achieve. Equal opportunity implies adequacy funding because to have an equal opportunity, an at-risk student may require more resources. This is a foundational component of an adequacy model of school funding.
How, then, do content standards and OTL standards impact school finance? Simply put, standards have essentially defined what an adequate education looks like. From that point, one could work backwards to identify the inputs necessary to reach those outcomes (Ryan, 2008). Some states have taken this on by conducting costing-out studies that attempt to quantify the resources and subsequent cost of delivering the necessary education to produce desired student outcomes. At-risk students, because they are starting so far behind in terms of quality of teachers, facilities, and materials, will cost states more to educate than their more advantaged peers, which is exactly the premise of adequacy funding.

The standards movement can be seen as a positive development for school finance advocates because ultimately, it serves the purpose of attempting to increase resources for the neediest students. The existence of the standards has helped to identify an adequate education because content standards themselves express what students should know and be able to do. Since the states have approved content standards, an adequate education has therefore actually been defined by the legislature, which is useful in maintaining the separation of powers doctrine between the legislature and the judiciary.

Having a definition of an adequate education is particularly valuable for the courts as they utilize the standards and assessments as the benchmarks to analyze whether a system is providing the necessary inputs for students to achieve the desired outcomes (Ryan, 2008). Standards can also assist the courts in developing model approaches for implementing effective remedies (Rebell, 2002, p. 9). In other words, having a definition of an adequate education gives the courts a clearer picture of what remedies must be
mandated in order to bring the system into compliance with its own definition (Ryan, 2008).

**School finance litigation history.**

As Justice Earl Warren wrote in the landmark opinion in *Brown v. Board of Education* (1954), “perhaps the most important function,” the government can play is to support public education (p. 2). He acknowledged that expenditures for education demonstrate our recognition of the importance of education to our democratic society (Brown v Board of Education, 347 U.S. 483).

Critics of the educational system can point to an abundance of evidence to support the claims that the system is ill-equipped to meet the needs of the 21st century. Expenditures, adjusted for inflation, have nearly doubled since 1970, high school graduation rates and the test scores of American students have not registered gains over the past four decades (Hanushek, 2003, 2008; Rivkin, 1997). In fact, the United States is lagging significantly behind other advanced nations in almost every indicator. Students seem to fall further behind the longer they remain in the system and are the furthest behind just as they are making their way into the work force. Important to the discussion of school finance, is that the gap between high and low-income students, which is more evident in the United States than in other world-class systems. As the McKensey Report (2009) pointed out “given the enormous economic impact of educational achievement, this is one of the best indicators of equal opportunity in a society, and one on which the United States fares poorly,” (p. 9).
With these red flags waving, policymakers and educational professionals have used a list of reforms to move the system in the right direction. Everything from more accountability, vouchers, back-to-basic curriculums, and pay-for-performance models have all been employed with limited success (West & Peterson, 2007). As these very public transformations have been occurring, another kind of reform has been at work and seeks improvement through the judicial system. These lawsuits have focused on the deteriorating conditions of schools, the large numbers of uncertified or unqualified teachers, and the limited access to high-quality teaching and learning materials. The courts have ordered more money as remedy for states not providing, particularly poor children, with sufficient funding, resulting in access to a quality education as guaranteed by the state’s constitution (West & Peterson, 2007). This forms the basic framework for what is referred to as adequacy litigation.

The history of adequacy litigation can be characterized as occurring in three waves of court actions. Although they are referred to as distinct movements, the lines are frequently blurred as to when the adequacy cases truly began to appear in the courts. The first wave of litigation that eventually supported adequacy lawsuits came from a prior legal innovation, the equity lawsuit. In these cases, plaintiffs from property-poor districts claimed that students were being denied equal educational opportunities because of wealth-related disparities among school districts. The first case, Serrano v. Priest (1971), allowed plaintiffs to argue that property-poor districts were unable to garner sufficient tax revenues in order to provide a quality education, therefore being unfair and thus violating their equal protection rights under the Fourteenth Amendment of the U.S. Constitution.
These disparities throughout the state were a result of property-tax methods of school finance that were unconstitutional (Patt, 1999). As evidence, plaintiffs documented that the Beverly Hills School District spent $1,200 per student during the 1968-69 school year whereas another district in the same county, Baldwin Park School District, spent $600 per student during the same period (Patt, 1999). In addition to the actual disparities in per-pupil funding between the two districts, the tax rates reflected another form of disparity with the tax rate in the Baldwin School District being more than double that of the Beverly Hills School District.

The ruling in *Serrano* was in favor of the plaintiffs, holding that education was a fundamental right under the California and the U.S. Constitutions and stated that it rose to a right because “education is necessary for the maintenance of the democracy, influences the youth, and has been defined as compulsory” (Patt, 1999, p. 558). The courts also found that any wealth-related differences in spending within the state were discriminatory and violated the federal equal protection clause (Guthrie, 2001; Reed, 2001).

The court also rejected the defendant’s claims that there was a compelling interest in the local control over the financing and operation of schools. According to the court, local control was a “cruel illusion” (*Serrano I*, 1971: p. 1261) for property-poor districts, as the lack of taxable wealth, effectively gave residents no control over how much they had to spend on their schools (Minorini and Sugarman, 1999.)

The equity claim in this case clarified the legal principle of “wealth neutrality” (Coons, Clune, & Sugarman, 1970), which clearly required equal treatment of all students across school districts and should not be tied to the wealth of the district in which the
child lives. Although the principle was unable to offer unequivocal guidance in other cases, it did stand closely coupled with the concepts of equal opportunity set forth by the constitution and again brought forth by the *Brown v. Board of Education* of the 1950s (West & Peterson, 2007).

Not only did this case have significance in the legal world, it had a resounding effect on the state of California. Substantial backlash to the ruling, which forced property-wealthy districts to redistribute resources to property-poor districts, caused parents to opt for private schools for their children. In fact, the percentage of students attending private schools after the *Serrano* ruling increased by 50% (Downes & Schoeman, 1998). Even though the legislature was bound to remedy, their action was also met with hostility and is credited as one of the factors in California’s tax revolt in 1978 (Fischel, 1989, 1996). Proposition 13 was passed by voters and prevented tax increases on property value unless it was sold. Although unforeseeable at the time, this tax perspective would put California in a financial predicament as the burden for funding schools increasingly made its way from the local to the state level. California would simply not have the revenue at the state level to maintain its accustomed per-pupil level of funding (Sonstelie, Brunner, & Ardon, 2000.)

Even with the public turmoil that *Serrano* created, other plaintiffss attempted to ride on the coattails of the *Serrano* success. It was a short-lived ride, however. In 1973, plaintiffs in the *San Antonio Independent School District v. Rodriguez* case argued that the state’s funding system violated the U.S. Constitution’s equal protection clause because of its reliance on local property wealth and therefore, discriminated against
children from low-property wealth districts. The plaintiffs held in district court, but upon appeal to the U.S. Supreme Court, a split court found that education is not a fundamental right guaranteed by the Fourteenth Amendment because there was no mandate for education to be found, either directly or indirectly, in the U.S. Constitution. The Texas funding system was declared constitutional and the principle of local control was used as rational justification for the system (Patt, 1999; *San Antonio I. S. D. v. Rodriguez*, 1973).

With the defeat in *Rodriguez*, the first wave of equity cases had concluded and school finance reform advocates were forced to find alternative approaches to solve the problem of school district funding disparities. They then turned to state constitutions that specifically ordered legislatures to provide education to the citizens of the state. This began the second wave of litigation.

In *Robinson v. Cahill* (303 A.2d 273, 1973, Robinson I) plaintiffs employed a different strategy and shifted the focus from the federal equal protection clause to the New Jersey state education clause, which called for all students to be engaged in a “thorough and efficient system” of public education (*New Jersey Constitution of 1947*, Art. VIII, sec. 4, pt. 1). Education clauses were important to equity claims as evidence that the public had an enforceable right to equal educational opportunity under the state constitution (West & Peterson, 2007). The central concept brought to light by the *Robinson* case was that the state constitution called for every pupil to have an equal opportunity to develop skills that would equip him or her for participation in a democracy as well as competition in the labor market. This statement is not unlike other education clauses, but the court’s response was to look at the state’s compliance to the clause in
strictly a dollar and cents view. It had no other viable criteria for measuring compliance against the constitutional standard. This becomes a crucial point as we move to adequacy.

While equity cases continued to be battled during the 1970s, two principal cases that generated the concept of equity in access to adequate educational opportunities were being decided and would be the precursors to the current model of adequacy. It expanded the equity idea to include not only equity of resources, but equity of provisions deemed indispensible for all students to achieve desired educational outcomes (Minorini & Sugarman, 1999). In both the West Virginia and Washington Supreme Court cases (Pauley v. Kelley, 255 S.E. 2d 859, 1979; Seattle v. State of Washington, 585 P.2d71, 1978), the school finance systems were ruled to violate the education clause of the state constitutions by both relying heavily on revenues from property taxes and as a result in disparities of property wealth created systems in property-poor districts that were quite deficient in their ability to deliver adequate educational opportunities. In both cases, the courts returned to the legislature with a charge to remedy the systems.

From 1980 to 1988, two state high courts declared their state school finance systems unconstitutional whereas eight systems were upheld. Underwood (1995) summarized the decisions in the second wave of litigation by recognizing that when the courts held for the state, they did so by maintaining that education was not a fundamental right and consequently, not in violation of equal protection claims. The courts also looked very narrowly at what the states were required to provide based on the indefinite language of the education clauses. Finally, the courts rejected equity arguments when
plaintiffs did not demonstrate sufficient injury. In other words, just because money was unequally distributed didn’t necessarily mean the constitutional rights of students in property-poor districts were violated.

As equity lawsuits were being played out, another reform effort was underway. The country was influenced by the federal report *A Nation at Risk* (1983), which declared the educational system had eroded to a state of mediocrity. With this as the catalyst, a number of significant reforms such as the introduction of standards, high-stakes accountability, and teacher accreditation were established. Because of the intense focus on achievement and accountability, less school finance litigation occurred from 1983-1988, but what did occur was a shifting of some local control to the state level in regards to curricular standards, assessment, and to some degree, school funding systems. In the late 1980s then, is the point that school finance litigation and school reform partnered as plaintiffs and focused attention on sufficient resources necessary to achieve these mandated state standards. The standards movement was the impetus for the *third wave* of school finance litigation centering on educational adequacy, which saw property-poor districts again seeking relief from the courts. If plaintiffs in adequacy lawsuits could successfully argue that the state was not providing adequate resources, particularly to the poorest districts, in order for students to achieve a specific level of educational outcome, then the school funding system would be in violation of meeting its constitutional mandate of the state’s educational clause (Patt, 1999; Reed, 2001).

The *third wave* of litigation was marked by decisions from courts in Texas, Montana, and Kentucky, which held their state school funding systems to be
unconstitutional. In *Edgewood v. Kirby* (777 S.W.2d 391, 1989) the plaintiffs successfully argued the existence of glaring disparities in property wealth among the communities within the state. The Texas state constitution called for a system that was efficient and because of the gross disparities in property wealth, the system no longer functioned in an efficient nor effective way (*Edgewood, 1989*). As in other equity cases, the courts relied on the state’s education clause as the benchmark by which to evaluate the funding system.

Montana’s case *Helena Elementary School District No.1 v. State*, 760 P.2d 684 (1989) was similar in nature to *Edgewood* in that the plaintiffs claimed the state’s educational finance system was unconstitutional because it failed to provide students with equal educational opportunities as guaranteed under the education clause of the state constitution. The Montana constitution called for “a system of education which will develop the full educational potential of each person” (Montana Constitution, Art. X, sec. 1, pt. 1). The court ruled in favor of the plaintiffs and cited the spending disparities among the state’s school districts translated into denial of an adequate education as outlined in the constitution.

The most significant of these early adequacy cases was the *Rose v. Council for Better Education* (790 S.W. 2d 186, 1989) case in Kentucky. In 1989, the Kentucky Supreme Court ruled the entire educational system of the state was unconstitutional. The courts relied on the state’s education clause, which called for an “efficient system of common schools throughout the state” and held that the system did not afford all students with equal access to adequate educational opportunities (Heise, 1995). The mere fact that
the entire system was ruled inadequate was not the only first in this case. In addition to the mandated fiscal action from the legislature, the courts provided policymakers with a set of educational objectives to improve the nature of the system. The court further outlined seven educational goals that an efficient school system, when remedied by the legislature’s action, would have to meet in order to be compliant with the court’s order (Rose v. Council for Better Educ., 1989). The list, though developed by the court, is consistent with conventionally held beliefs about the fundamental components of a quality education, holding that it should “foster oral and written communication, provide knowledge of different economic, political and social systems; foster mental and physical health, develop an appreciation of the arts; and prepare students for higher education or vocational training and ultimately employment” (Eastman, 2007, p. 65).

Not to be outdone by the courts, the legislature took immediate action and enacted the Kentucky Education Reform Act (KERA) in 1990 (Hess, 2007). It represented a statewide, comprehensive reform effort that established an entirely new funding mechanism that guaranteed a minimum per-pupil dollar amount for students across the state. As demanded by the courts, KERA compelled the state to develop a new statewide performance accountability system in which curricular frameworks, assessments, and reporting were designed (Hess, 2007).

As these three cases illustrate, the third wave of school finance litigation, Rose, in particular, ushered in challenges of school funding systems based on adequacy rather than grounds of equity. State constitutions guarantee certain commitments regarding the provision of education within the state. These commitments are interpreted as an
adequate education and necessitate adequate resources. With adequacy litigation, there is a persistent emphasis on the demand for increased resources for disadvantaged students. Adequacy cases point to and are reconciled with the fact that resources will be distributed unequally with additional resources being funneled to high-need students and schools (Berry, 2007).

From the early days of adequacy litigation to the present, advocates in 45 out of 50 states have brought lawsuits against states challenging the manner in which public schools are funded (National Access Network, 2010). Since 1989 to March 2010, 22 strictly school adequacy finance cases have been decided for the plaintiffs, where 11 have been won by state defendants. Currently there are seven cases that are pending (National Access Network, 2010).

Although a limited scope of school finance litigation has been discussed here, it is evident that the legal strategies employed by plaintiffs required adjustments over time. Initially, plaintiffs sought equity relief using the equal protection clause of the U.S. Constitution. When this strategy proved ineffective, the approach shifted to seeking relief under state equal protection clauses as well as state education clauses. The use of education clauses marked the third wave of school finance litigation and along with the standards movement, demanded that the courts evaluate the adequacy of school funding systems based on its ability to provide property-poor school districts with the resources necessary to ensure that all students had an equal opportunity to attain the desired outcome.
Adequacy model - 100% solution model.

With underachievement, underfunding, and adequacy litigation being ever-present concerns for policymakers, educators, and the public, there seems to be a lasting search for the silver bullet that can fix all of our educational woes. Advocates for reform will, at times, present ideas or plans as part of public relations campaigns that are often steeped in so-called educational research and call for all stakeholders to engage in lobbying on behalf of the quick fix.

School finance strategies are not immune. According to Baker and Reed (2009), Many politicians and pundits have convinced voters that America’s public education systems waste millions of dollars on a daily basis and attempt to convince the public that government must take a more business-like approach and utilize fiscal common sense to fix the financial mess that schools have made. (p. 67)

This perspective has left the system susceptible to fully packaged reforms that have little supportive empirical evidence and may simply be unproductive.

Two such solutions are known as the 65-cent solution and the 100% solution. Briefly, the 65-cent solution was promoted by several in the business community, particularly, Patrick Byrne, CEO of Overstock.com. The plan is relatively simple and calls for a state statue requiring that districts allocate 65% of their current operating expenses to instruction and specifically to the classroom. The most appealing element of the plan is with this redistribution of funds, it is suggested that, districts will have abundant resources without having to ask taxpayers for additional revenue. Because of the arbitrary, one-size-fits-all nature, data suggesting the 65% rule had little impact on student achievement, the 65-cent solution quickly slipped out of favor in the school finance reform community (Bracey, 2006; Embry, 2006; Lance, 2006).
The second plan, although slow to be recognized, is the 100% solution. This plan is more consistent with the overall concept of adequacy and has greater potential to support a distribution of resources that reflects the mix of a school’s student population. The plan has three components, with the first calling for decentralization of financial decisions from the central office to the school sites (Baker & Elmer, 2009). In order to make financial decisions, the second component of the plan comes into play. Districts will allocate to schools resources based on weighted student funding (Baker & Elmer, 2009). These weights function in the following way: each student is valued at a 1.0. Students with specific at-risk characteristics are then given an add-on value or funding weight that is added to the base value. For example, a student who qualifies for the federal free and reduced lunch program is given an add-on value of 17% or .17 added to the base funding value of 1.0. For each at-risk student then, the district receives 17% more funding (Carey, 2002). Across the country, these at-risk weights range from 10% to 100% more per-pupil funding to compensate educational programs for at-risk students. The most common weight appears to be in the range of 20-25% (Alexander & Salmon, 1995). These weightings are not, however, grounded in research (Alexander & Wall, 2006) and often appear ad hoc in nature. Even if states have increased weightings, there is little evidence that the increase is appropriate to produce the desired student outcomes. States have used historical funding patterns (Figlio, 2004; Rothstein, 2005) or have simply based estimates on what other states have instituted (Guthrie, 1997) as a means for determining the costs of providing programs for disadvantaged students.
This brings us to the third component of the plan, which revolves around the issue of choice. The plan recommends students have the choice to attend schools in the system that are showing the highest performance (Baker & Elmer, 2009). If the decentralized budgeting is done correctly and the incentives are aligned, then high performing schools would opt to serve more high-need students.

A deeper look at the other facets of the 100% solution is necessary should it be considered a viable adequacy option for school finance reform. With this solution, the state does not raise the level of funding, but rather lawmakers require districts to reallocate existing funds. Resources, real dollars, not staffing allocations, would go directly to a school and could be spent in a flexible manner, but tied to accountability systems that focus more on outcomes than on inputs. Proponents indicate that resources can migrate across school boundaries and be redistributed to schools that serve a greater number of at-risk students (Roza & Miles, 2004). During the model’s use in the Seattle school district, the program did focus resources in schools serving non-native language English speakers, children of poverty, and special education students (Roza & Miles, 2004).

As of 2008, 12 large urban school districts were engaged in weighted student funding in one form or another. Three more districts are in the planning stage, while 12 more are working on proposals for adoption and implementation (Baker & Elmer, 2009).

It should be noted, however, that although districts may be contemplating its implementation, criticism of the model does exist (Rebell, 2006) and is certainly worth considering. First, Rebell (2006) suggests the model ignores the overarching issue of
school funding, which is the lack of resources in general. It simply creates a shifting-of-the-problem scenario. Second, the model fails to address the difficulty of assessing realistic and reasonable weightings designed to provide the necessary resources to those schools that work with higher populations of at-risk students. Rebell (2006) draws attention to the political nature of this task and cites a district in Cincinnati that concluded the process with a weighted student funding system that provided an extra 5% for students from low-income backgrounds and 29% extra for gifted and talented students. This scenario is a clear illustration of the difficulty of establishing these weights through political compromise. The third criticism of the model identified by Rebell (2006) lies in the decentralization of educational governance. The assumption is that by bypassing district bureaucracy, efficiency will automatically lead to school improvement. It seems not to take into account the fact that school improvement is a complicated endeavor engaging a host of elements such as improved instruction, aligned curriculum, teacher enhancement, and community involvement. School improvement may not occur merely as a result of an infusion of financial resources (Rebell, 2006).

As the school finance litigation continues, policymakers, educators, and the public will be searching for models of funding that address the adequacy question. The 100% solution, although currently flawed, is the model that most closely addresses the components of an adequacy model of school funding. It allocates resources based on individual student need. Those resources follow the student to the school he/she attends, and real dollars should arrive at the local school that is empowered to make decisions about the most effective use of the resources. The solution has the potential to create
more intra- and inter-district equity as resources can travel to where there is the greatest need. In the end, the 100% solution could be identified by the courts as a possible remedy to school finance systems that are deemed unconstitutional.

**Factors Affecting Support of Adequacy**

**Tradeoffs.**

Americans repeatedly identify money as being one of the most persistent issues plaguing public education today (Phi Delta Kappan and the Gallup Organization, 2003). State and national polling would suggest that people support the theoretical idea of equalizing per-pupil funding even if that might lead to resources being shifted away from more affluent districts (Hochschild & Scott, 1998; Reed, 2001). To push the concept one step further, Shaw and Reinhart’s (2001) work indicated that the public is willing to accept a shift in public school financing from the local to the state level.

Although the public polling suggests that people are comfortable with and support both the idea of resource equity and the manner in which that could be accomplished, in reality, the public is strongly opposed to such notions and often lobby or vote against these ideas whenever possible (Shelly, 2004). For example, voters in Vermont experienced a contentious battle before the state finally instituted a uniform statewide property tax in which the funds were collected, put into a general fund, and redistributed to school districts across the state (Mathis & Fleming, 2002). Property-rich districts, consequently, now pay more in taxes than before and receive a smaller portion of school district revenue (Picus, 1998).
There seems to be a strong disconnect between what people are willing to agree with and the actual productive support they will lend to real reform efforts. The work to identify the trade-off factors that generally interfere with support for school funding reform are captured in the work of Bryan Shelly (2004) and will be summarized throughout this section.

As previously stated, the public seems to espouse equalizing per-pupil funding across districts. Their support, however, appears only in the abstract and as tradeoffs become more apparent, opposition to the reform grows. In other words, the public likes the just idea of equal funding, but when supporting that idea comes with circumstances or tradeoffs that affect them directly, their support wanes (Shelly, 2004). Three powerful tradeoffs that are recognized in the literature deal with taxation, loss of local control, and the redistribution of resources.

Taxation is a regular part of American life and the public is subjected to taxation on a variety of levels from sales tax, to specific ownership tax, to federal income tax. Attitudes regarding taxation cluster around several concepts including economic self-interest and symbolic issues (Reed, 2001). Intuitively, we assume that if one is responsible for paying for a tax, the attitude towards that tax is less favorable than when someone else is responsible for paying the tax. That notion is strongly supported by researchers who have found that when the costs are directly perceived and are consistently focused, one supports taxation that benefits him/her personally (Bowler & Donovan, 1995; Green and Gerken, 1989; Sears & Citrin, 1982). This makes the situation of adequate per-pupil funding by increased taxation an interesting question
because it represents taxation that is broadly distributed and not felt on a direct and personal level, possibly increasing opposition to such school finance reform (Reed, 2001).

If public opposition to increased taxation cannot be solely attributable to self-interest, what accounts for further opposition? Symbolic concerns can also influence people’s attitudes toward certain fiscal reforms. Sears and Citrin (1982) contended that opposition rooted in ideology, political party identification, and symbolic racism can all be connected to attitudes about taxes.

Another tradeoff that individuals will consider before supporting school finance reform is how local control may be weakened by proposed initiatives. Douglas Reed (2004), author of *On Equal Terms: The Constitutional Politics of Educational Opportunity*, has demonstrated in his work that there is nothing that erodes support for school finance reform more quickly than people’s fear that they will lose control over their local district and schools.

The third tradeoff that may wear away support for school finance reforms is the redistribution of resources. Part of the American tradition is tied to a strong work ethic that encourages people to work hard, earn more money, move to a better house, and be able to send their children to a better school. There is a claim that goes with having good schools as a result of hard work. This sense of entitlement makes people hesitant to transfer the products of their labor out of their communities since others have not earned the benefits (Carr & Fuhrman, 1999).
Localism.

Although local control is identified as a tradeoff associated with opposition to school finance reform, its significance is evident in other ways as well (Reed, 2001). The idea of local control can be sub-divided into two distinct categories that illustrate the different reasons why the public has so long embraced local control and the benefits of local government. First, localism represents the perceived value of small-scale government and second, localism represents a way to separate people and resources (Shelly, 2004; Weber & Brace, 1999; Danielson, 1976; Carr & Furhman, 1999).

America has a long history that supports the value of small-scale governments (Tocqueville, 1969). Colonial town hall meetings evoke a romantic image of the citizenry interacting with the government, granting citizens a personal connection with those that govern, and the development of the powerful feeling of being able to manage their own affairs. Scholars argue that local government is better able to respond to local needs and conditions, craft regulations that are unique to specific communities, and work more diligently to ensure the people of the community continue to trust their government (Shelly, 2004; Weber & Brace, 1999; Wirt & Kirst, 1997). Experiencing and participating in the government at a local level, citizens have the opportunity to acquire skills that were necessary for the maintenance of the democracy. Skills that encompass problem solving, critical thinking, and positive social interaction are vital for local governments to operate effectively. Small scale governance encourages the citizenry to develop competence to solve problems using a wide base of knowledge, to critically think about and evaluate issues from multiple perspectives, and to appropriately relate with one
another with compromise forming the basis of those interactions (Hansen, 2002; Oliver, 2001; Williamson, 1989).

Localism that represents small-scale government does allow people a sense of control over the democratic process nearest to them, but at the same time can be distorted to perpetuate the desire of suburbanites to separate themselves and their resources from those who are different or less advantaged. McConnell (1966) asserted that decentralization or local governance actually decreases democratic results. Since the American experience is closely related to class and race, local decision-making means that affluent white individuals, who possess a louder political voice, have more money to use in community policymaking than do poor minorities, therefore making it much more difficult for them to participate in the political process: “Scholars argue that wealthy residents are aware of this fact and use local government to justify what is at base a selfish desire to minimize social welfare spending on the poor and non-white (Shelly, 2005, p. 20). Simply put, it allows the wealthy to draw a line of separation between themselves and poor minorities. This isolation is intentional and cloaked by localism:

Those moving outward have been seeking social separation from the lower classes as well as better housing and more spacious surrounding . . . Given these concerns, residents of middle-class areas . . . seek to use the local political system to exclude those whose presence threatens to undermine the quality of life in their neighborhood. (Danielson, 1976, 6)

School finance reform, it would seem, is at the mercy of localism and the intentional separation of the advantaged. As long as school funding remains a local issue as a result of property wealth, the option to redistribute resources seems unlikely. By hiding behind localism, individuals are provided with a socially acceptable way for the
affluent whites to keep their educational taxes low and their dollars local. Localism becomes more about exclusion and less about democracy (Shelly, 2004). For middle class families, education is viewed as the key to success, and parents will attempt to orchestrate all possible competitive advantage for their children, even if it means unfair treatment for other children in other districts (Carr & Furhman, 1999). That desire to maintain privilege and remain separate from those less advantaged is enough to influence decisions regarding school choice. Studies have shown that people value separation from those they perceive as undesirable enough to oppose reform legislation (Schneider & Buckley, 2002; Welner, 2001).

**Federal involvement.**

Historically, public education in the United States has almost exclusively been a local concern. In fact, the federal government was virtually absent from public education until the late 1950s and early 1960s. The Cold War and Sputnik were events that seemed to draw the federal government into a more active and present role in public education and the national response after the *Nation at Risk* report illustrated an elevated role of state governments in education (Reed, 2001). No Child Left Behind (NCLB) has required more federal government involvement than in the past but even with these limited, but growing, examples of federal involvement in education, the public has not significantly adjusted its perspective that public education is about local issues, local needs, and local organizations (National Commission on Excellence in Education, 1983). Interestingly enough, the public perspective on local control seems inconsistent at best, and as the 2002 *Phi Delta Kappan* poll shows, 63% of Americans favor using
standardized tests for accountability to national and state learning standards, and 57% favor an expansion of the federal role in NCLB. It appears that Americans have a history of local control but are willing to give some of that control over to the state and federal government. The question then becomes what conditions must be overcome in order for the public to fully engage in support of an adequacy model of school funding?

**Judicial involvement.**

Another argument that represents possible resistance to the support of an adequacy model of funding is the concern over judicial involvement in defining and enforcing adequacy. Equality is a standard that is easy to rule on; all districts are treated the same and receive the same amount of funding. Equity can be determined without any decision about what an education ought to accomplish or how much it should cost. Equity can even be based on the standard of existing levels of educational spending. Adequacy, on the other hand, is a bit more undefined. It requires challenging reflection on and determinations about the purposes of education, how to bring it about, and what resources are necessary to do so. As opposed to equality and equity, adequacy would appear to lack specific standards and therefore, be a poor candidate for judicial remedy.

At the center of judicial involvement is, again, local control. Commentators fall along both sides of this discussion. Some suggest it is necessary and appropriate for the courts to intervene in disputes that are important to the local operation of social institutions while others point to the potential danger of the involvement of the courts and the possible violation of the traditional principle of separation of powers (Starr, 2007; Dunn & Derthick, 2007). Adequacy lawsuits are essentially political events in that they
seek to allocate things of value, namely, the amount of money spent on education. That allocation, in the end, produces winners and losers. Adding to the political nature of adequacy lawsuits is the connection of adequacy to the standards and accountability movement and NCLB. With the political quality of these lawsuits, it thrusts the courts into the institutional realm traditionally reserved for the legislature, which is the authority to raise revenue and appropriate funds (Dunn & Derthick, 2007). When this occurs, the complaint heard is that the judiciary has “neither institutional capacity, judicial expertise, nor resources to become fully equipped to formulate, implement, and then manage a system that would ensure ‘adequate’ education” (Starr, 2007, p. 314). As the judge in Thompson v. Engelking (1975) noted, having the courts enter into the controversial area of public funding sets up the judiciary as a “super-legislator” and can create a level of discomfort among policymakers, educators, and the public (p. 640).

Although educational litigation and public law are in the forefront and seem, by some, to be a positive development, judicial remedies can be challenging to state legislatures and have far-reaching policymaking consequences. For example, in an adequacy case in New York, the legislature is still unable to comply with the judicially mandated remedy to increase educational spending by billions of dollars (Campaign for Fiscal Equity v. New York, 801 N.E.2d 326 (N.Y. 2005). Another case in Idaho in which the courts ruled the school funding system unconstitutional, the legislature in a spiteful maneuver authorized the judiciary to impose an unlimited property-tax increase in order to pay for costly building repairs (Idaho Schools for Equal Educational Opportunity v. Idaho, 97 P.3d 453 (Id. 2004). Both of these cases highlight the disconnect that exists
between the high ideals of the court and the reality of legislation (Starr, 2007). It has been argued that the courts should do what the courts are most capable of and that is to decide a case, settle a controversy, or decide on the constitutionality of an issue (Starr, 2007). NCLB does provide guidance, however. If a school district has violated NCLB, the remedy is relatively simple: The school district must comply. “NCLB creates a remedial structure of its own, and the courts are fully capable of deciding on whether the legislatively created adequacy remedy is being followed” (Starr, 2007, p. 316).

Even when the courts have mandated additional funding for unconstitutional school funding systems, the court’s limited enforcement power is revealed and it encountered legislative resistance that usually results in protracted litigation that requires numerous follow-ups to court decisions and orders (Briffault, 2007; Carr & Fuhrman, 1999; Starr, 2007).

Another issue facing advocates of judicially imposed reform is the notion of judicially manageable standards (Briffault, 2007). Manageable standards imply and require court decisions that provide an actual solution. If courts do not think they have a manageable solution, institutional self-interest may restrain them. Legislatures would argue that the courts do not adhere to the principle of manageable standards because many of the assigned court remedies are not feasible.

The solution to the problem of manageable standards comes as a result of the standards movement. Rebell (2002) asserted that courts, by way of content standards, have a useful tool in developing judicially manageable approaches for implementing effective remedies. Based on the content standards then, the courts have the benchmark
by which to establish and gauge the adequacy of a state’s school finance system. Although this may sound promising, the Rose (1989) case established an operating definition of adequacy that included elements such as sufficient oral and written communication skills and adequate knowledge of economic social and political systems; however, since the court didn’t mandate a specific reform, the description became political in nature rather than a judicially manageable standard. The difficulty comes with further examination of the decision. These elements imply that an adequate education is one that is responsive to a changing society. Therefore, the manageable judicial standard becomes impossible to establish because the standard is ever changing (Dunn & Derthick, 2007).

**Teacher Advocacy for Adequacy**

For some, unions evoke images of contentious negotiations, strikes, and constant struggle between labor and management. Although union membership is diminishing across the country (United States Bureau of Labor Statistics, 2007), teachers’ unions continue to be among the most unionized of all professions. How unions and their teacher membership may be a significant participant in educational reform is best understood in context of the history of unions, their effectiveness, and their potential to promote positive school reform.

The discussion will not begin with a look at unions from the organizations that developed back in the earliest days of American history but will fast forward to the formation of the National Education Association (NEA). This organization was first created by superintendents in 1857 and was originally designed as a professional
organization to promote teaching as a profession (Kerchner & Mitchell, 1988). Membership connoted a demonstration of professionalism, and districts with 100% membership were thought of as demonstrating professional leadership (Lieberman, 2000). The organization, although management-run, was designed to promote teacher interests through lobbying efforts often at the state level.

By the middle of the 1960s, membership in the NEA had shifted from being primarily school administrators and college presidents to 85% classroom teachers, school superintendents, and other supervision personnel (Murphy, 1999). With this shift in demographics, the organization began to feel that the best interest of teachers was not necessarily being served, as the union was forced to negotiate from both the labor and the management side of issues and as late as even 1969, the NEA found itself struggling to negotiate for classroom teachers rather than engaging in more professional type activities (Murphy, 1999).

As the NEA was forming and developing, another union was under construction as well. In 1917, The American Federation of Teachers (AFT) received its charter from the American Federation of Labor and became the first national teachers’ union to organize (Lieberman, 2000). In 1961, the United Federation of Teachers (UFT), which was affiliated with the AFT and headed by Albert Shanker, was selected by teachers to represent their collective bargaining right (Lieberman, 2000). It was during this time that Shanker began to espouse the philosophy that “unionism and professionalism were not contradictory or competing values” (as cited in Kahlenberg, 2007, p. 43). As a result, he not only lobbied for more traditional collective bargaining elements like wages and
benefits, but he added to the list such things as smaller class sizes and the ability to remove disruptive students from classes. He declared to the organization that it was insufficient to “get pretty good salary and welfare provisions if the union did not also get anything to help the children to learn and to read” (as cited in Kahlenberg, 2007, p. 79). This could be considered the first time that the union mobilized its influence and used it as a means to improve teaching and learning.

The NEA and AFT during the 1960s were in constant competition for the right to collectively bargain for the benefit of teachers, but as the decade rolled along, the divide between the two groups was growing and ultimately not serving teachers (Kahlenberg, 2007). Talks to merge the two organizations began and continued through the 1980s. Although some mergers did occur at the state level, at the national level the measure was defeated. One of the key arguments that persisted in dividing the group was the NEA membership continued to view the AFT as trade unionist and the NEA saw itself as a professional organization. Proponents of the merger saw it as a way to provide a stronger voice to its membership and to more efficiently utilize resources (Lieberman, 2000).

Today, the AFT supports 1.4 million members (American Federation of Teachers, 2009), whereas the NEA claims 3.2 million members (National Education Association, 2009). Each organization still seeks to represent the needs of its membership and promote the professional ideas of education. Included in both mission statements, however, are references to the quality of the services provided to America’s children along with a commitment to improve the educational institution and create an outstanding public school system. Those elements of the mission statements that divert the focus
away from the self-interests of the membership and concentrate it on the quality of schools will play a significant role in the new unionism that developed in the early 1990s (Peterson, 2006).

Unionism is defined as a reach for ideals within a school. Unionization is characterized by the advancement of ideas through resolving disputes between labor and management (Kerchner & Mitchell, 1988). The two concepts have largely been at odds, but really form the foundation for the development of a new vision of unionism. It was NEA president, Bob Chase who, in 1997 described the NEA history as one that was concentrated on issues of the membership, and although those are still important objectives, it is no longer sufficient. He shifted the conversation to focus on the needs of schools and the interests of American’s children. Peterson (2006) wrote that unions were encouraged to think differently about their role in educational reform and to take more responsibility to ensure its success.

As a result of this altered philosophy, the Teacher Union Reform Network (TURN) was established and headed by Adam Urbanski and it became his goal to use teachers and unions as “agents of reform” so as to better promote partnerships that would contribute to the “excellence and equity in our public schools” (Brookings Institution, 2000, p.11).

In order to move forward in the realm of educational reform, teachers must act independently as well as within the context of their union. For example, working to increase teacher participation in state adequacy costing-out studies is one method of individual action taken to improve public engagement in school finance reform. Costing-
out studies are undertaken to determine the price of delivering an adequate education that is sufficient to prepare students to accomplished defined standards (Springer & Guthrie, 2007;). The cost can be determined in several ways, but the method that is most conducive to teacher involvement is known as *professional judgment* (Augenblick & Myers, 2002; Chambers, 2006). It is with this approach that experienced, professional educators, familiar with the learning needs of children within their state, work collectively to design, at a school level, the content and structure of an instructional program that is tied to specifically defined outcomes. Once these panels of professionals have delineated a program and have accounted for any programmatic requirements of at-risk students, resources are identified and costs tabulated (Chambers, 2006). Rebell (2006) highlighted the advantages of including educators in the costing process as they are extremely familiar with program implementation, resource use, and specific learning needs of local students. By bringing forth this expertise, dialogue is promoted and consensus is built in circumstances that can be quite politically charged; and, as Kerchner et al. (1997) pointed out, this may suggest that teachers are ready to assume more of a role in reform and unions must reward those teachers who take an active role in advocacy and policymaking. Local teachers and administrators can pioneer initiatives that directly impact students (Eberts, 2007).

Kerchner and Koppich (2004), nevertheless, see challenges to union-sponsored reform in three ways. First, is the lack of clarity about goals. School improvement is a complex business, and discussions of reform will undoubtedly raise concerns on the part of teachers as they worry about their jobs and salaries. Second, is the issue of
organizational capacity. As Roger and Oakes (2005) suggested, simply having information about reform does not guarantee support or help to create an urgency about reform that may be lacking today as many teachers today fail to recognize the need for improvement. Third, is the lack of vision. Without the commitment from teachers and leaders, it is difficult to build a strong political coalition.

Teachers along with unions, then, must forge partnership with outside entities if reform is to be successful. As Rogers and Oakes (2005) described, high quality and equitable schools cannot be created solely from inside the education institution. Coalition building between unions and outside organizations can energize reform in a number of ways. Coalitions are able to extend the reach of unions beyond their membership, whereas unions bring resources to the table. They tend to have the largest membership base and consequently, large-scale funds. Together, coalitions bring powerful communication networks to campaigns and can mobilize strong participation in grassroots actions. By participating in grassroots advocacy, political energy is created and provides leverage to be used to advance a cause (Rogers & Terriquez, 2009).

As stated earlier, the time may be right for teachers to engage in advocacy to assert educational civil rights for students:

The last quarter of a century of community organizing for school reform may have prepared the ground for substantial change. The year 2000 brought with it 25 years of legal battles at the state level to remove urban educational inequities. More than 70% of these court cases have been successful, and many new state mandates have been written by the courts; more than a few await the public political pressure that might force full funding. These cases and the years of education organizing that are behind us and that continue may provide the legitimation and leverage needed for national movement building. (Anyon, 2009, p. 2000)
With the encouraging view of unions taking a more proactive approach to school reform coupled with the possibility of a more concentrated movement regarding school finance reform, teachers could play an instrumental role in advancing the idea of adequacy. Armed with an understanding of the concept of adequacy as well as an understanding of the factors that influence support for adequacy, teachers could be useful in shaping advocacy groups that work to apply political pressure to policymakers.
Chapter 3: Methodology

The review of literature in the previous chapter detailed the foundational information associated with an adequacy model of school funding and outlined the factors that may influence support for such a system. This chapter describes the methodology utilized in this study. The chapter’s organization is as follows: description of the research design, description of the population and sampling techniques, development and validation of the instrument, data collection procedures, data analysis, and limitations.

The purpose of this study was to determine teacher perceptions of the factors that influence support for an adequacy model of school funding. The secondary purpose was to determine what relationships exist between specific demographic variables and teacher perceptions about the factors that influence support for an adequacy model of school funding. As with any survey, the purpose was to generate data that could be analyzed and then generalized from the sample to the population so that inferences regarding the research questions could be made (Fowler, 2002). In this case, the study findings could be used to increase public awareness and develop strategies to target themes that build support for an adequacy model of school funding.

Because the information of interest in this study focused on teacher perception, the type of research design used was of a descriptive quantitative nature (Gall, Gall, &
Borg, 2003). The methodology was chosen because it was an effective way to acquire teachers’ opinions and was helpful in developing an in-depth understanding of their perspective. This methodology was appropriate to the study in that it provided a numeric description for the factors that influence support of an adequacy model of funding and was both cost and time effective.

**Population and Sample**

The population selected for the study was teachers of the Montrose County School District RE-1J. At the time of the study, the district served 6,512 students in a rural setting in western Colorado (State of the District Report, Montrose County School District, RE-1J, 2009). The school district is similar to other districts in the state by nature of the state’s geographic categorization, student enrollment, student demographics, and numbers of registered voters in the county in which the school district is located.

The Colorado Department of Education (CDE) categorizes school districts according to the population centers from which the school district draws its student enrollment. For example, district categorizations range from Denver Metro to Rural; the Montrose County School District is identified as an Outlying City, which indicates that most of the students within the district live in population centers greater than 7,000 but less than 30,000 people (CDE, 2009). Currently, 14 school districts are similarly classified (CDE, 2009). Montrose can also be compared to the six other school districts having similar student enrollment ranging from 5,000 to 7,000 students, but may have had different geographic categorizations.
The demographics of the district (State of the District Report, Montrose School District, RE-1J, 2009) indicate the student population to be 32% Hispanic students, 9% special education students, and 10% English language learners. Fifty-six percent of students participate in the free and reduced lunch program. Across the state in the Outlying City classification of which Montrose is included, the average percentage of students participating in the free and reduced lunch program is 48%. For those districts participating in the federal lunch program that have similar student enrollment to the Montrose school district, the average participation is 39%. Again, Montrose’s minority population accounts for 32% of its student population. For those districts in the Outlying City classification, 42% is the average student population that is minority. For those districts with similar enrollment to Montrose, 39% is the average student population that is minority.

In addition to student demographics, the teacher distribution by ethnicity for all of the schools that participated in the study was a minimum of 90% white (State of the District Report, Montrose County School District, RE-1J, 2009). The district, as reported by the CDE (2009), employs a teaching force that is 95% white. The average for the other districts in the Outlying Cities classification is 91% white teachers, whereas the average for the districts with comparable student enrollment to Montrose is 92% white teachers (Colorado Department of Education, 2009).

A component of the survey that was critical to the nature of the study is the political view of the teachers. In October 2009, Montrose County School District RE-1J had 20,418 registered voters (Colorado Department of State, 2009). Of these voters, 21%
were registered as Democrats, 47% as Republicans, and 32% as unaffiliated voters (Colorado Department of State, 2009). When looking at other districts and/or counties in the Outlying Cities category that have approximately 20,000 registered voters, Montrose, along with four other counties, has a higher percentage of registered Republicans than Democrats. The Urban-Suburban category consisted of four out of five counties with more registered Republicans than Democrats. Montrose is dissimilar to the Denver Metro category because those counties (with the exception of Jefferson County) have higher percentages of registered Democrats than Republicans.

The sampling procedure utilized for the study is a convenient sample based on the rural location. However, the selection of schools from which teachers were surveyed was purposeful (Gall et al, 2003). This type of sampling was driven by the intention of the study and by the fact that the researcher was interested in teacher perception. It also provided the easiest and quickest method whereby to obtain the most significant number of responses needed from the target population in order to analyze meaningful results. The schools were selected for inclusion based on demographic information, specifically, the percentage of students receiving free and reduced lunch. Those schools at each level (elementary, middle, and high) that had a free and reduced lunch rate nearest to 50% were selected for participation. Once schools were decided on, all teachers who met the criteria, which is described below, were given the opportunity to participate in the survey.

One-hundred-fifty participants were the targeted number of respondents, which Sudman (1976) suggested is an appropriate number of participants for survey research. This sample began with 151 respondents, but because of incomplete or missing
responses, the final sample size was 139 respondents. To arrive at the final sample size, the number of missing answers were counted and converted to z-scores to ensure that missing data could be randomly distributed. All respondents with a z-score less than 2 were selected. Missing data was then replaced with the median of the sample. Respondents were teachers that taught at one of the following levels: elementary, middle, or high school. To be eligible for inclusion in the study, teachers had to be currently employed by the Montrose County School District RE-1J, currently had to hold a Colorado teaching certification, had to work in a non-chartered school, and had be willing to participate in the study.

**Instrumentation**

**Instrument.**

The instrument or survey created for the study provided a numeric description of the factors that influence support for an adequacy model of school funding. The use of a survey provided a cost and time effective means to collect data from the targeted sample in order to conduct a meaningful analysis of the data.

The 32-item instrument that was used for the study was created by the researcher and included original items as well as items adapted from previously administered state and national polls. Specifically, the researcher modified one item from a state poll (Capstone Poll Omnibus Spring Survey, 1994) and five items from the national ETS America Speak Out on Public School Funding Survey (2004).

The instrument was divided into two sections. The sections are as follows:
1. Part A (11 items): *Demographic Information* included closed format items to acquire information regarding the respondents’ gender, age, years in the profession, teaching level, highest degree, need to supplement financially within their classrooms, children of school age, property ownership, political views, and union membership. Although the last three items referred to above are demographic in character, they were placed at the end of the survey because of their potentially sensitive nature.

2. Part B (21 items): *Factors* included Lickert scale and ranking items that addressed teacher perceptions of the factors that influence support for an adequacy model of school funding. Items were based on the following concepts: support for adequacy, tradeoffs, local control that incorporated the notion of democratic virtues of local governance, localism as a means of separating people and resources, and judicial involvement.

A copy of the instrument is provided in Appendix A.

**Validity.**

In order to determine the content validity or the extent to which the instrument covered the scope of the concept, an expert with knowledge in the field of school finance was identified and contacted electronically and was provided with a list of proposed items to be included in the *Factors* sections of the survey instrument. He was asked to examine the instrument for the following: relevancy of the item to the objectives of the instrument and imprecise or ambiguous language. The instrument was revised according
to expert and dissertation committee suggestions. A copy of the questionnaire to be completed by the school finance expert is included in Appendix B.

**Reliability.**

A pilot study was conducted to further examine the instrument, to validate procedures of administration, and to determine reliability of the instrument. The pilot study sample included seven volunteer teachers from Northside Elementary School in the Montrose County School District RE-1J. Teachers took the survey and then discussed with the researcher issues relative to objectives, level of difficulty, and imprecise or ambiguous language, length, and layout. The instrument was revised according to suggestions.

**Data Collection Procedures**

Data collection began with a letter of introduction and invitation to participate in the study addressed to the superintendent of the Montrose County School District RE-1J. With permission granted by the superintendent, a letter of introduction and invitation to participate was given to district principals. Principals were then contacted by phone to arrange a convenient time to have the survey administered. At the time of survey administration, the researcher provided teachers with an information sheet that offered an invitation to participate, outlined the study, and included pertinent contact information. Participation of teachers was voluntary and anonymous. The return of the questionnaire signified his/her consent to participate in the study. Copies of sample introduction letters, permission letters, and information sheets are included in Appendix C.
Data Analysis

The primary dependent variable of this study is teacher perceptions of the factors that influence support for an adequacy model of school funding. A series of independent demographic variables were gathered for each teacher that included gender, age, years in the profession, teaching level, highest degree earned, need to supplement financially within their classrooms, children of school age, property ownership, political views, and union membership.

Data was tabulated using standard descriptive statistics (mean, standard deviations, frequencies, and percentages). As a general data analysis approach, bivariate comparisons were performed using Pearson correlations and t-tests for independent means. Multiple regression prediction equations were used to examine the relationships between specific demographics and teacher perceptions of the factors that influence support for an adequacy model of school funding. Table 1 documents the research questions, data elements, and statistical tests used for the study.

The determination of an adequate sample size for the regression models was determined following a recommendation by Stevens (2002), indicating that for reliable equations, approximately 15 respondents per predictor are necessary. Given that method, the anticipated sample size for this study was 150 teachers.

Table 1

*Data Analysis Table*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Element</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the teacher perceptions of the factors that</td>
<td>Survey items: 9-29</td>
<td>Descriptive statistics (mean, standard</td>
</tr>
</tbody>
</table>
2a. What bivariate relationships exist between teacher perceptions of the factors that influence support for an adequacy model of school funding and demographic variables?

Survey items: 9-29 and demographic items: 1-8, 30-32

Inferential bivariate comparison, Pearson correlations, t-tests

2b. What multivariate relationships exist between teacher perceptions of the factors that influence support for an adequacy model of school funding and demographic variables?

Five Subscales
1) Support: Survey items: 9-12
2) Tradeoffs: Survey items: 13-16
3) Virtues of local governance: Survey items: 17,18, 26-28
4) Separation: Survey items: 19-23
5) Judicial Involvement: Survey items: 24, 25, 29

Demographic items: 1-8, 30-32

Five multivariate multiple regressions models

Limitations

Limitations of the study included the use of only one school district; although the district is similar to other rural districts in Colorado, the results cannot be generalized to other districts because characteristics and variables are not controlled. The sampled teachers are typical, but to apply their perceptions to teachers in other school districts of Colorado may be an overstatement of the results. Since the study was conducted with teachers who volunteered to participate, the conclusions that were drawn represent a
limited view of the subset of teachers surveyed and may not be representative of the entire teaching population. Finally, the sample was taken at one instance in time and does not represent how perspectives may change over time due to such things as experience, maturity, and possibly even changing economic conditions.
Chapter 4: Results

The purpose of this study was to determine teacher perceptions of the factors that influence support for an adequacy model of school funding and to determine what relationships exist between specific demographic variables and teacher perceptions about the factors that influence support for an adequacy model of school funding. A total of 139 teachers participated in the study.

Table 2 displays the frequency counts and percentages for selected variables. Of those who participated, 33.8% were male and 66.2% were female. For teaching level, 32.4% taught at the elementary level, whereas 54.0% taught at the middle school level, and 13.7% worked at the high school level. The highest degree earned was almost evenly split with 50.4% of the teachers obtaining a bachelor’s degree, whereas 49.6% had acquired a master’s degree. Teachers spend their own money on classroom supplements and supplies, with 98.6% of teachers indicating as such. For household income, the median income was $79,500, with 9.3% reporting household income of $110,000/year or more. Most (79.1%) teachers owned property in the district in which they taught. As for political views, 46.1% of teachers identified themselves as conservative or very conservative, 30.9% considered themselves moderate, whereas 23.0% described themselves as liberal or very liberal. The percentage of teachers belonging to the local teacher’s union was 66.9% (see Table 2).
Table 2

*Frequency Counts for Selected Variables (N = 139)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>47</td>
<td>33.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>92</td>
<td>66.2</td>
</tr>
<tr>
<td>Teaching Level</td>
<td>Elementary</td>
<td>45</td>
<td>32.4</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>75</td>
<td>54.0</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>19</td>
<td>13.7</td>
</tr>
<tr>
<td>Highest Degree</td>
<td>Bachelor's</td>
<td>70</td>
<td>50.4</td>
</tr>
<tr>
<td></td>
<td>Master's</td>
<td>69</td>
<td>49.6</td>
</tr>
<tr>
<td>Buy Own Supplements and Supplies</td>
<td>Yes</td>
<td>137</td>
<td>98.6</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Have Children of School Age</td>
<td>Yes</td>
<td>62</td>
<td>44.6</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>77</td>
<td>55.4</td>
</tr>
<tr>
<td>Household Income</td>
<td>$30-49,000</td>
<td>24</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>$50-69,000</td>
<td>43</td>
<td>30.9</td>
</tr>
<tr>
<td></td>
<td>$70-89,000</td>
<td>31</td>
<td>22.3</td>
</tr>
<tr>
<td></td>
<td>$90-109,000</td>
<td>28</td>
<td>20.1</td>
</tr>
<tr>
<td></td>
<td>$110-129,000</td>
<td>5</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>$130-149,000</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>More than $150,000</td>
<td>6</td>
<td>4.3</td>
</tr>
</tbody>
</table>
Table 2 *Continued*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Property</td>
<td>Yes</td>
<td>110</td>
<td>79.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>29</td>
<td>20.9</td>
</tr>
<tr>
<td>Political Views</td>
<td>Very Conservative</td>
<td>14</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>Conservative</td>
<td>50</td>
<td>36.0</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>43</td>
<td>30.9</td>
</tr>
<tr>
<td></td>
<td>Liberal</td>
<td>26</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td>Very Liberal</td>
<td>6</td>
<td>4.3</td>
</tr>
<tr>
<td>Member of Local Teacher's Union</td>
<td>Yes</td>
<td>93</td>
<td>66.9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>46</td>
<td>33.1</td>
</tr>
</tbody>
</table>

Table 3 displays the descriptive statistics for selected variables. These included the respondent’s age ($M = 42.26, SD = 10.17$) and their years of experience ($M = 13.66, SD = 9.28$; see Table 3).

Table 3

*Descriptive Statistics for Selected Variables (N = 139)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>42.26</td>
<td>10.17</td>
<td>24</td>
<td>65</td>
</tr>
<tr>
<td>Years of Professional Experience</td>
<td>13.66</td>
<td>9.28</td>
<td>1</td>
<td>41</td>
</tr>
</tbody>
</table>
Table 3 displays the psychometric characteristics for the five summated scale scores. Four of the five scale scores had alpha coefficients at or below \( r = .20 \), which is considered to be unacceptable levels of reliability. Only the two-item alpha coefficient for judicial involvement \( (r = .84) \) was considered to be acceptable (Gall et al., 2003; see Table 4).

As a result of the low reliability coefficients (Table 4), a principal components factor analysis was performed on the 17 Likert scale items. The model selected eigenvalues greater than 1.0, which resulted in a seven-factor solution that accounted for 65.53\% of the variance. Inspection of the factors found larger first (eigenvalue = 3.19, 18.76\% of the variance) and second (eigenvalue = 1.75, 10.27\% of the variance) factors and smaller third (eigenvalue = 1.50, 8.82\% of the variance) through seventh (eigenvalue = 1.03, 6.04\% of the variance). Based on an examination of the scree plot (Stevens, 2002), a two-factor solution was obtained. After a Varimax rotation, Factor 1 was called Willingness to Share and Factor 2 was called Fair Distribution System.

Table 4

<table>
<thead>
<tr>
<th>Score</th>
<th>Number of Items</th>
<th>( M )</th>
<th>( SD )</th>
<th>Low</th>
<th>High</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>4</td>
<td>3.16</td>
<td>0.50</td>
<td>1.75</td>
<td>4.25</td>
<td>0.20</td>
</tr>
<tr>
<td>Tradeoffs</td>
<td>4</td>
<td>2.75</td>
<td>0.44</td>
<td>1.50</td>
<td>3.75</td>
<td>0.05</td>
</tr>
<tr>
<td>Virtues of Local Governance</td>
<td>2</td>
<td>3.42</td>
<td>0.64</td>
<td>1.50</td>
<td>5.00</td>
<td>0.07</td>
</tr>
<tr>
<td>Separation</td>
<td>5</td>
<td>3.16</td>
<td>0.40</td>
<td>1.80</td>
<td>4.20</td>
<td>0.11</td>
</tr>
<tr>
<td>Judicial Involvement</td>
<td>2</td>
<td>2.89</td>
<td>0.93</td>
<td>1.00</td>
<td>5.00</td>
<td>0.84</td>
</tr>
</tbody>
</table>
Table 5 displays the loadings for the 17 Likert scale scores with the two factors. The strongest loadings for Factor 1, *Willingness to Share*, were a negative relationship with Item 23, “People who move to an area because it has good schools should not have to pay to help the schools in less-wealthy areas (-.74) and a positive relationship with Item 22, “Some of the tax revenue raised in wealthy areas should be shared with less wealthy areas (.66). For Factor 2, *Fair Distribution System*, the strongest loadings were with Item 25, “The courts should play a role in deciding whether a school finance system is inadequate even in cases where the legislature and the voters have determined the current school finance system is adequate (.80),” and Item 24, “The courts should play a role in deciding whether the state’s school finance system is adequately funded (.78)” (see Table 5).

### Table 5

*Loadings for the Likert Scale Items with Factor Scores (N = 139)*

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factors 1</th>
<th>Factors 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. People who move to an area because it has good schools should not have to pay to help the schools in less-wealthy areas.</td>
<td>- .74</td>
<td></td>
</tr>
<tr>
<td>22. Some of the tax revenue raised in wealthy areas should be shared with less wealthy areas.</td>
<td>.66</td>
<td>.34</td>
</tr>
<tr>
<td>11. A school finance system should allocate more money and resources to minority and low-income students.</td>
<td>.56</td>
<td>.39</td>
</tr>
<tr>
<td>13. I would be willing to pay more taxes to improve the academic achievement of minority students and low-income students.</td>
<td>.52</td>
<td>.42</td>
</tr>
</tbody>
</table>
| Scale Items                                                                                                                                                                                                 | Factors  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14. School finance systems which are based on student need would result in poorer schools receiving more money and resources than before and wealthier schools receiving less than before.</td>
<td>.48</td>
</tr>
<tr>
<td>19. Local taxes are a good way to fund public schools because it gives citizens control over their own school system.</td>
<td>-.48</td>
</tr>
<tr>
<td>15. If more money and resources were allocated to students based on need, my local school district would lose some state funding.</td>
<td>-.31</td>
</tr>
<tr>
<td>9. The Colorado school finance system provides the money required to get all, or nearly all, students achieving at a proficient level or higher on the CSAP.</td>
<td></td>
</tr>
<tr>
<td>20. State taxes are a good way to fund public schools because they are generally stable in nature.</td>
<td></td>
</tr>
<tr>
<td>18. There should be a law requiring money and resources generated by a particular student to follow that student to the school he or she is attending.</td>
<td></td>
</tr>
<tr>
<td>25. The courts should play a role in deciding whether a school finance system is inadequate even in cases where the legislature and the voters have determined the current school finance system is adequate.</td>
<td>.80</td>
</tr>
<tr>
<td>24. The courts should play a role in deciding whether the state’s school finance system is adequately funded.</td>
<td>.78</td>
</tr>
<tr>
<td>10. A school finance system should primarily allocate money and other resources directly to schools based on individually calculated student need.</td>
<td>.49</td>
</tr>
<tr>
<td>17. School-based councils that include parents, teachers, and principals should be created to work together at the local level to make decisions regarding the allocation of money and resources.</td>
<td>.46</td>
</tr>
<tr>
<td>12. Additional money and resources allocated directly to classrooms will improve student achievement.</td>
<td>.36</td>
</tr>
</tbody>
</table>
Table 5 Continued

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>Factor a</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Those in my community would be willing to pay more taxes to improve the academic achievement of minority students and low income students.</td>
<td>1 2</td>
</tr>
</tbody>
</table>

a Factors: 1 = Willingness to Share, 2 = Fair Distribution System.

Note. Items were sorted by highest loadings and only loadings greater than .29 are displayed in the table.

Research Question 1

Research Question 1 asked, “What are the teacher perceptions of the factors that influence support for an adequacy model of school funding?” To answer this, Table 6 displays the ratings for the survey items sorted by the highest mean. These ratings were given using a five-point metric: 1 = Strongly Disagree to 5 = Strongly Agree. The highest level of agreement was for Item 17, “School-based councils that include parents, teachers, and principals should be created to work together at the local level to make decisions regarding the allocation of money and resources” ($M = 3.81$). The item with the second highest level of agreement was for Item 12, “Additional money and resources allocated directly to classrooms will improve student achievement” ($M = 3.79$). The lowest level of agreement was for Item 15, “If more money and resources were allocated to students based on need, my local school district would lose some state funding” ($M = 2.14$). The second lowest level of agreement was for Item 9, “The Colorado school finance system provides the money required to get all, or nearly all, students achieving at a proficient level or higher on the CSAP” ($M = 2.19$; see Table 6).
Table 6

*Ratings of Survey Items Sorted by Highest Mean (N = 139)*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. School-based councils that include parents, teachers, and principals should be created to work together at the local level to make decisions regarding the allocations of money and resources.</td>
<td>3.81</td>
<td>0.79</td>
</tr>
<tr>
<td>12. Additional money and resources allocated directly to classrooms will improve student achievement.</td>
<td>3.79</td>
<td>0.85</td>
</tr>
<tr>
<td>21. Colorado should continue the practice of “override” in which a district with enough property wealth, along with voter approval, can raise and spend more property tax revenues on their local school district than is authorized by the state.</td>
<td>3.52</td>
<td>0.88</td>
</tr>
<tr>
<td>14. School finance systems which are based on student need would result in poorer schools receiving more money and resources than before and wealthier schools receiving less than before.</td>
<td>3.46</td>
<td>0.85</td>
</tr>
<tr>
<td>10. A school finance system should primarily allocate money and other resources directly to schools based on individually calculated student need.</td>
<td>3.42</td>
<td>0.88</td>
</tr>
<tr>
<td>22. Some of the tax revenue raised in wealthy areas should be shared with less wealthy areas.</td>
<td>3.38</td>
<td>1.05</td>
</tr>
<tr>
<td>20. State taxes are a good way to fund public education because they are generally stable in nature.</td>
<td>3.35</td>
<td>0.86</td>
</tr>
<tr>
<td>11. A school finance system should allocate more money and resources to minority and low-income students.</td>
<td>3.22</td>
<td>1.01</td>
</tr>
<tr>
<td>13. I would be willing to pay more taxes to improve the academic achievement of minority and low-income students.</td>
<td>3.17</td>
<td>1.02</td>
</tr>
<tr>
<td>18. There should be a law requiring money and resources generated by a particular student to follow that student to the school he or she is attending.</td>
<td>3.04</td>
<td>0.98</td>
</tr>
<tr>
<td>Item</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>19. Local taxes are a good way to fund public schools because it gives citizens control over their own school system.</td>
<td>2.92</td>
<td>0.98</td>
</tr>
<tr>
<td>24. The courts should play a role in deciding whether the state’s school finance system is adequately funded.</td>
<td>2.91</td>
<td>1.02</td>
</tr>
<tr>
<td>25. The courts should play a role in deciding whether a school finance system is inadequate even in cases where the legislature and the voters have determined the current school finance system is adequate.</td>
<td>2.86</td>
<td>0.99</td>
</tr>
<tr>
<td>23. People who move to an area because it has good schools should not have to pay to help schools in less-wealthy areas.</td>
<td>2.63</td>
<td>0.95</td>
</tr>
<tr>
<td>16. Those in my community would be willing to pay more taxes to improve the academic achievement of minority and low-income students.</td>
<td>2.24</td>
<td>0.8</td>
</tr>
<tr>
<td>9. The Colorado school finance system provides the money required to get all, or nearly all, students achieving at a proficient level or higher on the CSAP (Colorado Student Assessment Program).</td>
<td>2.19</td>
<td>0.97</td>
</tr>
<tr>
<td>15. If more money and resources were allocated to students based on need, my local school district would lose some state funding.</td>
<td>2.14</td>
<td>0.73</td>
</tr>
</tbody>
</table>

*Note.* Ratings based on a five-point scale: 1 = *Strongly Disagree*, to 5 = *Strongly Disagree*

Table 7 displays the ratings of selected items sorted by lowest mean. In this case, the lowest mean indicated the strongest agreement. The items were rated based on a three-point scale: 1 = *Most Favorable Rating*, 2 = *Middle Rating*, 3 = *Least Favorable Rating*. The item with the most favorable rating was Item 28c, “Local government has the greatest capability for sound fiscal management” ($M = 1.43$). This was followed by
Item 29c, “Legislative branch of government is best equipped to make funding decisions” ($M = 1.65$). The item with the least favorable rating was Item 28a, “Federal government has the least capability for sound fiscal management” ($M = 2.64$) followed by Item 27a, “Federal government is least effective at reallocating money and resources” ($M = 2.41$; see Table 7).

**Table 7**

*Ratings of Selected Items Sorted by Lowest Mean (N = 139)*

<table>
<thead>
<tr>
<th>Item</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>28c. Local capability for sound fiscal management</td>
<td>1.43</td>
<td>0.71</td>
</tr>
<tr>
<td>29c. Legislature equipped for funding decisions</td>
<td>1.65</td>
<td>0.84</td>
</tr>
<tr>
<td>26b. State effectiveness ensuring funding provides additional money</td>
<td>1.83</td>
<td>0.60</td>
</tr>
<tr>
<td>27c. Local effectiveness at reallocating money</td>
<td>1.85</td>
<td>0.88</td>
</tr>
<tr>
<td>27b. State effectiveness at reallocating money</td>
<td>1.90</td>
<td>0.63</td>
</tr>
<tr>
<td>26c. Local effectiveness ensuring funding provides additional money</td>
<td>1.97</td>
<td>0.86</td>
</tr>
<tr>
<td>28b. State capability for sound fiscal management</td>
<td>1.99</td>
<td>0.54</td>
</tr>
<tr>
<td>29b. Judicial equipped for funding decisions</td>
<td>2.16</td>
<td>0.74</td>
</tr>
<tr>
<td>29a. Executive equipped for funding decisions</td>
<td>2.23</td>
<td>0.70</td>
</tr>
<tr>
<td>26a. Federal effectiveness ensuring funding provides additional money</td>
<td>2.31</td>
<td>0.86</td>
</tr>
<tr>
<td>27a. Federal effectiveness at reallocating money</td>
<td>2.41</td>
<td>0.81</td>
</tr>
<tr>
<td>28a. Federal capability for sound management.</td>
<td>2.64</td>
<td>0.67</td>
</tr>
</tbody>
</table>
Note. Items based on a three-point scale: 1 = Most Favorable Rating, 2 = Middle Rating, 3 = Least Favorable Rating

Research Question 2a

Research Question 2a asked, “What bivariate relationships exist between teacher perceptions of the factors that influence support for an adequacy model of school funding and demographic variables?” To answer this question, the 29 perception questions (Survey Items 9-29 including the subsections of Items 26 to 29) were correlated with 10 of 11 demographic variables. One demographic variable (Question 6: Ever buy own school supplies?) was not included because almost all respondents (98.6%) answered “yes,” which resulted in minimal variability in the sample for that variable. This resulted in a total of 290 correlations.

Cohen (1988) suggested some guidelines for interpreting the strength of linear correlations. He suggested that a weak correlation typically had an absolute value of $r = .10$ (about 1% of the variance explained), a moderate correlation typically had an absolute value of $r = .30$ (about 9% of the variance explained) and a strong correlation typically had an absolute value of $r = .50$ (about 25% of the variance explained). With this sample size of $N = 139$, a trivial correlation of $r = .16$ (only 2.6% of the variance accounted for) is significant at the $p < .05$ level. Also, given 290 correlations, a researcher would expect about 14 correlations (4% of all the correlations calculated) to be statistically significant ($p < .05$) simply due to random fluctuations in the data (Gall et al., 2003). Therefore, for the sake of parsimony, this Results Chapter will primarily highlight those correlations that were of at least moderate strength to minimize the potential of
numerous Type I errors stemming from interpreting and drawing conclusions based on potentially spurious correlations.

For these 290 correlations, 26 were statistically significant ($p < .05$) and 4 were of moderate strength using the Cohen (1988) criteria. Specifically, having a liberal political view was related to more agreement with (a) Item 13, “I would be willing to pay more taxes to improve the academic achievement of minority students and low-income students,” $r = .44, p < .001$; (b) Item 22, “Some of the tax revenue raised in wealthy areas should be shared with less wealthy areas,” $r = .31, p < .001$; and (c) Item 25, “The courts should play a role in deciding whether a school finance system is inadequate even in cases where the legislature and the voters have determined the current school finance system is adequate,” $r = .32, p < .001$. In addition, having a liberal political view was related to less agreement with Item 23, “People who move to an area because it has good schools should not have to pay to help the schools in less-wealthy areas,” $r = -.37, p < .001$.

**Research Question 2b**

Research Question 2b asked, “What multivariate relationships exist between teacher perceptions of the factors that influence support for an adequacy model of school funding and demographic variables?” As stated above, the scale reliabilities were unacceptably low for the 19 Likert scale items (Table 4), so the decision was made to perform a principal components factor analysis (Table 5) and use the resulting scale scores instead.
As a preliminary analysis, Table 8 displays the Pearson product-moment correlations for 11 selected demographic variables with the willingness to share and the fair distribution system factors. Willingness to share was significantly correlated with 1 of the 11 variables at the $p < .001$ with one of those variables being of moderate strength using the Cohen (1988) criteria. Respondents with more liberal views had higher scores on both Factor 1, Willingness to Share ($r = .36, p = .001$) and Factor 2, Fair Distribution System ($r = .27, p = .001$; see Table 8).

Table 8

*Correlations for Selected Demographic Variables with Willingness to Share and Fair Distribution System Factors (N = 139)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Willingness to Share</th>
<th>Fair Distribution System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender $^a$</td>
<td>0.02</td>
<td>-0.03</td>
</tr>
<tr>
<td>Age</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>Years of Professional Experience</td>
<td>-0.04</td>
<td>-0.06</td>
</tr>
<tr>
<td>Teaching Level $^b$</td>
<td>-0.11</td>
<td>-0.06</td>
</tr>
<tr>
<td>Highest Degree $^c$</td>
<td>0.16</td>
<td>-0.01</td>
</tr>
<tr>
<td>Buy Own Supplements and Supplies $^d$</td>
<td>0.09</td>
<td>0.03</td>
</tr>
<tr>
<td>Have School Age Children $^d$</td>
<td>0.11</td>
<td>0.00</td>
</tr>
<tr>
<td>Household Income</td>
<td>-0.02</td>
<td>0.15</td>
</tr>
<tr>
<td>Own Property $^d$</td>
<td>0.15</td>
<td>0.09</td>
</tr>
<tr>
<td>Political Views $^e$</td>
<td>0.36  ****</td>
<td>0.27</td>
</tr>
</tbody>
</table>
Table 8 Continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>Willingness to Share</th>
<th>Fair Distribution System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member of Local Teacher's Union (^d)</td>
<td>0.05</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

**Note.** * p < .05. ** p < .01. *** p < .005. **** p < .001

\(^a\) Coding: 1 = Male 2 = Female

\(^b\) Coding: 1 = Elementary 2 = Middle 3 = High

\(^c\) Coding: 1 = Bachelor's 2 = Master's

\(^d\) Coding: 1 = Yes 2 = No

\(^e\) Coding: 1 = Very Conservative to 5 = Very Liberal

Table 9 displays the results of the backwards elimination regression model that predicted the willingness to share based on 10 candidate variables. The final four-variable model was statistically significant (\(p = .001\)) and accounted for 19.9% of the variance in the dependant variable. Specifically, higher willingness to share factor scores were related to: (a) an elementary grade teaching level (\(\beta = -.18, p = .001\)); (b) having a Master’s degree (\(\beta = .16, p = .04\)); (c) not owning property (\(\beta = .15, p = .05\)); and (d) having more liberal political views (\(\beta = .36, p = .001\); see Table 9).

Table 9

*Prediction of the Willingness to Share Factor Score Based on Selected Variables.*

<table>
<thead>
<tr>
<th>Backward Elimination Regression ((N = 139))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td>Teaching Level(^a)</td>
</tr>
</tbody>
</table>
Table 9 Continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree $^b$</td>
<td>0.32</td>
<td>0.16</td>
<td>0.16</td>
<td>0.04</td>
</tr>
<tr>
<td>Own Property $^c$</td>
<td>0.37</td>
<td>0.19</td>
<td>0.15</td>
<td>0.05</td>
</tr>
<tr>
<td>Political Views $^d$</td>
<td>0.36</td>
<td>0.08</td>
<td>0.36</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note. Final Model: $F(4, 134) = 8.34$, $p = .001$. $R^2 = .199$. Candidate variables $= 10$

$^a$ Coding: 1 = Elementary 2 = Middle 3 = High

$^b$ Coding: 1 = Bachelor's 2 = Master's

$^c$ Coding: 1 = Yes 2 = No

$^d$ Coding: 1 = Very Conservative to 5 = Very Liberal

Table 10 displays the results of the backwards elimination regression model that predicted the fair distribution system based on 10 candidate variables. The final two-variable model was statistically significant ($p = .001$) and accounted for 10.3% of the variance in the dependant variable. Specifically, higher fair distribution system factor scores were related to: (a) higher household income ($\beta = .17$, $p = .04$); and (b) more liberal political views ($\beta = .28$, $p = .001$; see Table 10).

Table 10

Prediction of the Fair Distribution System Factor Score Based on Selected Variables. Backwards Elimination Regression ($N = 139$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.19</td>
<td>0.32</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Household Income</td>
<td>0.11</td>
<td>0.06</td>
<td>0.17</td>
<td>0.04</td>
</tr>
</tbody>
</table>
Table 10 *Continued*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Views a</td>
<td>0.28</td>
<td>0.08</td>
<td>0.28</td>
<td>0.001</td>
</tr>
</tbody>
</table>

*Note.* Final Model: $F(2, 136) = 7.78, \ p = .001$. $R^2 = .103$. Candidate variables $= 10$

* a Coding: 1 = *Very Conservative* to 5 = *Very Liberal*
Chapter 5: Discussion

This chapter is structured into three primary sections: the introduction, the relationship of key findings to reviewed literature, and recommendations. The introduction will outline the purpose statement and research questions and summarize key findings, whereas the relationships section will highlight similarities and differences among the findings and the review of literature. The recommendation portion will focus on conclusions drawn from the findings as well as suggestions for future research.

Introduction

The public appears to support funding of education, but the equality and equity of that funding has long been in question (Reed, 2001). For years, low property wealth districts have waged battle in the courts as a means of stabilizing funding and increasing the equity for minority and low-income students (West & Peterson, 2007). With increased accountability of the last three decades, the standards movement has been the impetus for another kind of school finance litigation that centered on educational adequacy. Here, the attention was on the sufficiency of resources necessary to achieve mandated state standards. With minority and low-income students, adequacy advocates voiced the need for additional funding required to raise at-risk students to the mandated standard (Alexander & Wall, 2006). As developed in the introductory chapter, a case for adequacy as a model of school or district resource distribution can be developed on the
following concepts: (a) courts have favored adequacy litigation; (b) resources do matter, particularly for at-risk students; (c) states have attempted to account for the increase in cost necessary to educate at-risk students; and (d) the consequences for not increasing funding for at-risk students will have significant individual and economic repercussions. However, resistance to the model exists along academic and public lines.

**Purpose statement.**

It is along this public line that this study sought to determine teacher perceptions about the factors that influence support for an adequacy model of school funding. A more specific purpose, related directly to the value of the study, was to create credible findings from the data at a state level about teacher perspectives that could be used to inform public policy since teachers have the potential to build campaigns to increase public awareness and develop strategies to target themes that foster support for adequacy funding.

**Research questions.**

The research questions are as follows:

1. What are teacher perceptions about the factors that influence support for an adequacy model of school funding?

2. What relationships exist between specific demographic variables and teacher perceptions about the factors that influence support for an adequacy model of school funding?
Summary of Key Findings

The key findings for research question one are that teachers seem to support the concept of adequacy, but are less likely to support the concept when tradeoff issues such as taxation, loss of local control, and redistribution of resources are introduced.

Based on the ranking items from the survey, teachers viewed the local level of government more positively than the state or federal level on several perspectives. First, local government was seen as the most capable of sound fiscal management. Second, it was perceived as being the most effective at ensuring districts reallocated money and resources so that more money and resources are moved to the schools with the neediest students. In contrast, teachers identified the state level of government as having the greatest ability to provide additional funding to districts with the neediest students. Finally, teachers named the legislative branch of the government as best equipped to make funding decisions regarding the adequacy of school funding systems.

The research question 2a, asked, “What bivariate relationships exist between teacher perceptions of the factors that influence support for an adequacy model of school funding and demographic variables?” The findings reveal a correlation between a more liberal political point of view and three of the factors that influence support for adequacy: tradeoffs, separation, and judicial involvement. The tradeoff factor was correlated with a liberal political view as evidenced by a willingness to pay more taxes to improve the academic achievement of minority and low-income students. The separation factor was correlated with a liberal political view, as those with that view were more likely to agree with tax revenue raised in wealthy areas should be shared with less wealthy areas but did
not agree that people who move to an area because it has good schools should not have to pay to help schools in less wealthy areas. The third factor, judicial involvement, suggested that those with liberal political views felt the courts should play a role in determining the inadequacy of school finance systems even if the public has already deemed the system in adequate.

For research question 2b, a backwards elimination regression was utilized to determine if any relationships existed between teacher perceptions of the factors that influence the support for an adequacy model of school funding and demographic variables. In summary, more liberal political views were correlated with higher scores on both willingness to share and the fair distribution system factors. More specifically, those who would be the most willing to share or that would be the most willing to support the concept of adequacy are those that teach at the elementary level, have earned a master’s degree, do not own property in the district in which they teach, and have more liberal political views. With the fair distribution system factor, we can predict that those with higher household income and those with more liberal political views will be more supportive of an adequacy model of school funding.

**Technical Discussion of Findings**

Before any discussion of the findings can take place in terms of implications, it is necessary to discuss the technical issues of the study, although not identified by way of the proposal, during the data analysis created circumstances that slightly altered the course of the analysis and led to findings that were not as tightly aligned with the research questions as intended. The first issue that arose dealt with the psychometric
characteristics for the five summated scale scores. These included the factors of influence for support of the adequacy model of school funding: support, tradeoffs, virtues of local government, separation, and judicial involvement. Four of the five scale scores did not have an alpha coefficient at the acceptable level of reliability, forcing the researcher to use a principal component factor analysis. Although this analysis provided useable and relevant data, the two factors established, willingness to share and fair distribution system, were not factors designated in previous literature on the factors that influence public support for school finance reform. They do, however, capture the essence of adequacy funding in that the willingness to share is a key component in the redistribution of resources and in being able to see localism as something other than a means of separating people and resources. The same can be said for fair distribution system in that it captures the essence of adequacy with the concept of fair meaning not necessarily equal funding, but what is needed by individual students. The loading values from Table 5 indicate that items 25 and 24 have the highest values for factor 2, which was ultimately named fair distribution system. This makes sense since the alpha for judicial involvement was the only summated scale score with an acceptable level of consistency. One could argue that item 10, the next highest loading value, captures the essence of adequacy funding with funding being based on individual student need. A possible better name for fair distribution system may have been system of vertical equity.

Because it was necessary to create the two discreet factors, willingness to share and fair distribution system, the ability to correlate selected demographic variables with factors of support identified from literature (support, tradeoffs, virtues of local
government, separation, judicial involvement) was basically eliminated. The same can be said for the backward elimination regression. Although the data obtained through the analysis is of interest, it is not tightly aligned with the research question 2b. In order to fully assess teacher perceptions of the factors that influence support for adequacy models of school funding, survey items need to be structured in such a way so as to obtain the five summated scale scores that have internal reliability of an acceptable level. This would then allow for the appropriate correlation and regression analysis between the selected demographic variables and the factors of support.

**Relationships to Previous Literature**

The data from this study suggest that teachers support the concept of adequacy as a model of school funding and that support lessened slightly as tradeoffs were introduced. The finding here is consistent with the long standing ideas of Prothro and Grigg (1960), more current thinking from Hochschild and Scott, (1998) and with polling from Phi Delta Kappan (2002, 2003) asserting that people generally agree with an egalitarian concept or value but when faced with application of that value, agreement with the value is easily diminished. Viewed specifically in regards to school finance reform, the public likes the just idea of equal funding, but when supporting that idea comes with circumstances or tradeoffs that affect them directly, their support wanes. Although one of the tradeoffs that decreases support for reform is the loss of local control, Shaw and Reinhart (2001) have shown the public is willing to accept a shift in financing of education from the local to the state level. Teachers in this study identified the state as the level of government having the greatest ability to provide additional funding to districts with the neediest
students. This may suggest that teachers see the state with the capacity to affect adequacy funding, thus moving it from a local to a state issue.

Previous research conducted by Shelly (2004) using state public polling data demonstrated the more educated and more liberal a respondent was, the more likely one was to support school finance reform. That is consistent with the results of this study. Teachers with master’s degrees and with more liberal political views were more willing to share than those with bachelor’s degrees and those with more conservative political views. As established earlier, the willingness to share is essential to the redistribution of resources, which a key component to adequacy funding.

The third demographic variable that seemed to hold consistent with Shelly’s model (2004) was property ownership. Again, with public polling data, he established that those who owned property were less likely to support school finance reform. Once more, this was consistent with teacher perspectives from this study, as those who did not own property had a higher willingness to share factor score than those who owned property.

The last demographic variable to be noted is that of household income. In Shelly’s (2004) work, he looked at public polling data from three individual states; the data for household income, as with any of the variables, has the possibilities of being inconsistent among the states. Household income demonstrates such properties. Consequently, the data from this study is in both agreement and disagreement with his work. The date from this study suggested that household income predicted higher scores on the fair distribution system factor. This is consistent with a portion of Shelly’s work.
in that he suggested that as income increased, individuals were more likely to support school finance reform.

There appears to be two significant ways in which the data collected from this survey and previous literature vary. First is the idea of separation through localism, and the second is judicial involvement. Studies have shown that people value separation from those they perceive as undesirable enough to oppose reform legislation (Schneider & Buckley, 2002; Welner, 2001). Although the public may have this sentiment, it appears liberal minded teachers don’t seem to view localism as a means to separate people and resources. There was strong disagreement with the statement “People who move to an area because it has good schools should not have to pay to help the schools in less-wealthy areas,” and strong agreement with “Some of the tax revenue raised in wealthy areas should be shared with less wealthy areas.” Teacher reaction as indicated to both of these statements seems to suggest a push back against localism disguised as an avenue to keep resources away from poor or rural areas. Stated another way, teachers seemed less willing to use localism as a strategy of separating people and resources.

The second area of disagreement with the literature was that teachers in this study saw the courts as having a role in deciding whether a school finance system was inadequately funded or not, even under circumstances in which the legislature and the voters had spoken and said that the system was adequate. Although not necessarily assumable from the data of this study, a willingness to see the courts as having a say in the process is consistent with Rebell’s (2006) perspective that the court’s provide “no other authoritative, impartial governmental entity that is capable of monitoring and
regulating the delicate mixture of expert and political judgments that is involved in this enterprise” (p. 1336). In other words, the courts are not bound by the pressure of re-election. Since legislatures in most states are dominated by suburban majorities, without courts to rule on the constitutional nature of funding systems, left unchecked, the legislative process will continue to perpetuate funding models that disproportionately favor suburban school systems (Gittell, 1998). This stance as to the importance of the court’s role in protecting the underrepresented would seem to coincide with how teachers feel about the separation issue and localism not being used as a veiled attempt to separate people and resources. In Shelly’s (2004) work, however, the public was less willing to support school finance reform if the reform was spurred by a judge’s ruling. That hesitancy to support the judicial activism in school finance reform is also supported by Hanushek (2006), and he describes that the appropriations process as specifically the domain of the political branches of the government, that being the legislative and the executive. The judicial branch, however, was designed for the interpretation of laws as offered by the Constitution. Throughout the appropriations process, legislators gather information, interact with hired specialists, and participate in legislative committees and use all this experience to produce outcomes that are checked, so to speak, by the public, through the re-election process. Hanushek (2006) argued that the courts, often with limited expertise, operate in an arena void of these checks and balances; often generating judgments that may be difficult if not impossible for the legislature to carry out.
Recommendations

As one reviews the issue of school finance reform in general and adequacy specifically, a triangular interaction between the courts, the legislature, and the public emerges. Each one of the bodies has impacted adequacy funding in some manner but never independently and always hindered by the public. For example, those advocating school finance reform have found narrow success applying energy through the courts in the form of adequacy litigation but as Rosenberg (1991) would suggest, the research on courts and policymaking has shown that courts cannot achieve the type of sweeping social change adequacy would require without support of the general public. The legislature, on the other hand, has advanced adequacy funding in a number of states but this progress has generally not occurred through the legislature’s own initiative but rather through legal challenges and remedies handed down by the courts. Rebell (2006) would remind us that left alone, the legislature, because of its general composition created by the more powerful voting elite, is prone to continue policies that disfavor urban and minority communities. Although the public, in theory, can shape the legislature in terms of elected officials, its ability to independently affect school finance reform is limited. Shelly (2004) argues the public as a whole has been relatively unsuccessful in its efforts to craft widespread support for school finance reform, due to the dual perspectives of localism that can be represented in one way as the values and benefits of small scale government and the other being represented as the value of separation as a means of keeping people and resources apart.
The courts and the legislature are closely interconnected and necessary for adequacy litigation and reform but when viewed as part of the triangular model, the public, although independently unsuccessful, is the necessary third component to further the agenda of school finance reform and it is the subset of stakeholders or teachers within that public and how those stakeholders advocate for adequacy that may hold part of the answer. This study identified teacher perceptions of the factors that influenced support for adequacy models of school funding which helped to identify those teachers most likely to support the concept of adequacy and those who might be the best candidates for grassroots advocacy groups that develop a greater capacity of understanding regarding funding issues, could agree on solutions, and could devise strategies for realizing the policy changes that benefit the neediest students.

In order to effectively engage in advocacy, school finance activists, unions and teachers must approach their efforts being mindful to avoid the misguided assumptions that have plagued educational reform for decades (Oakes & Rogers, 2006). The first assumption is that changes to equality or equity in the system can only be promoted from within (Oakes & Rogers, 2006). By framing the improvement this way, professionals are left to focus their attention on technical adjustments or structural changes. This might be where one would see a change in funding allocation that has little true impact on student achievement. To move beyond this assumption, all stakeholders including teachers, researchers, administrators, and union members must engage other organizations in reform efforts. For instance, an organization such as Great Education Colorado, which is supported by the Colorado Education Association and other professional organizations, is
a statewide grassroots effort working to increase the long-term investment in k-12 education and is an excellent example of the shared struggle to reform school finance from outside the educational system. Although Great Education Colorado is seeking increased funding for Colorado students in general and by default adequacy funding they are closely aligned with other organizations such as Colorado Children’s Voices which is a public interest law firm that is currently associated with the adequacy litigation in Colorado. Finally, becoming connected to projects such as the New Millennium Initiative (2009) which seeks to help teacher leaders become change agents by assisting them to “connect empirical evidence and teaching experience to a vision of student learning and then engage colleagues, union leaders, administrators, and policymakers to advance new policies and practices” (para. 3). It is through these organizations and organizations like them, that teachers can bring voice to the adequacy issue and work collectively to bring about productive change.

The second assumption is that inequalities in the system are maintained as a “result of ignorance rather than by deep cultural beliefs and assumptions about race” (Oakes & Rodgers, 2006, p. 14). The barriers to educational reform, adequacy funding included, lie less in the technical challenges but more in the deeply held cultural values and beliefs that those in position of advantage hold regarding issues of race, merit, schooling and the status quo (Ball, 2007). Previous studies (Schneider & Buckley, 2002; Shelly, 2004; Welner, 2001) have demonstrated that a valued norm such as localism as a means to separate people and resources has long roots in education and would require advocates to participate in changing this cultural belief, which is both culturally and
politically complex. This study identified those teachers with a more liberal political point of view were less affected by the concept of localism used to separate people and resources and therefore could be candidates well suited for a program like the New Millennium Initiative in which participants not only develop a knowledge base of understanding by partnering with administrators and union leaders but bring that understanding into communities. Quite possibly, that understanding could center on the skills and abilities necessary to change the cultural beliefs about localism used to separate people and resources, how to build grassroots support for adequacy, and how to best lobby policymakers on behalf of our neediest students.

Using these assumptions as the lens, one can appreciate the position of advocacy groups as particularly challenging when it comes to educational reform; but, when viewed more as a social movement, their ability to question existing cultural values and beliefs, challenge the distribution of resources, and forge new political arrangements that benefit those they represent is much more powerful. Social movements are shored by grassroots efforts, and teachers have the capacity to participate in community settings that as Stall and Stoecker (1998) described as work that empowers individuals, builds relationships, and creates action for change. Through all aspects of the work there is a construction of shared understanding that together form the basis for campaigns that allow ordinary people, teachers included, the knowledge, capacity, and power that social change requires (Ganz, 2002).

Should teachers and unions not become the voice of advancing adequacy and the status quo is maintained, who is to suffer but we as a society? “Inequality is the result of
flawed policies and structures that undermine democracy (Oakes & Rogers, 2006, p. 159). We all suffer as education has both a public and private good.

Profound thinkers about the American education system see its creation as largely civic in nature. An educated citizenry is necessary for the maintenance of the democratic process. The courts have consistently recognized the importance of education as serving the collective good as in *Brown v. Board* (1954) by stating education is central to “producing civic-minded persons capable of participating in our civic and democratic institutions (Brown v. Board of Education, 347 U.S. 483, [PIN]).” Even with more recent adequacy litigation, the courts continue to recognize the foundational need for education as preparation for civic life. For instance, the New Jersey Supreme Court held that

> [A] thorough and efficient [education] means more than teaching the skills needed in the labor market, . . . [i]t means being able to fulfill one’s role as a citizen, a role that encompasses far more than merely registering to vote” (Abbott v. Burke, 1990).

In a similar fashion, the New York Supreme Court ruled that a basic education prepared students to be capable of civic engagement, which enabled them to participate in the evaluation of complex issues in the political or science arenas or the ability to serve successfully on a jury that required analysis of complex issues and situations (Campaign for Fiscal Equity v. State, 801 N.E. 2d 326, 331 (N.Y. 2003).

If we don’t pay attention to adequacy, we run the risk of not only producing students who fail to engage civically, we run the risk of having students unable to participate in the other collective good of education, that being that education produces economically sufficient people who do not drain the state’s resources and who will continue to drive the expansion of the state’s economy. We must prepare students to
compete for jobs that enable them to support themselves and maintain a reasonable quality of life. Without proper funding, again, we run the risk of students not being able to take advantage of education and the private goods it provides. The state has an obligation to provide education that ensures an individual’s well-being and economic competitiveness. The system needs to prepare students with skills and knowledge necessary to move on to post-secondary opportunities, move into the labor market, and pursue personal interests. So if this is an obligation, the state ought to ensure a level playing field that would necessitate an adequacy model in which some students receive more funding in order to reach desired levels.

**Recommendation for Future Research**

The work to date surrounding the public perceptions about school finance reform has been conducted within a limited scope on the state level and on an even narrower scope at the national level. Most research has focused on the perception of equity with little to do with questions of adequacy. Having taken previously conducted research (Shelly, 2004) that focused on factors that affected support for school finance reform in general and modified it to look at factors that influenced support for an adequacy model of school funding, this study added in a minor way to the body of knowledge that currently exists regarding school finance reform.

The intention of this study was to determine perceptions of teachers about the factors that influence support for an adequacy model of school funding and to determine if there were relationships that existed between specific demographic variables and teacher perceptions about those factors. As this research focused on the perception of
teachers within a limited area, further research should be considered with an enlarged and more diverse sampling of teachers to be surveyed. Several particular areas of interest would be to specifically survey teachers that teach in a district different from where they live or to purposely survey teachers that teach in school districts that have low minority and low free and reduced lunch percentages. Other future research considerations include sampling administrators, as there may be a difference in how administrators perceptive the factors that influence support for an adequacy model. Their perspective may be dissimilar particularly in light of proposed models such as the 100% Solution, which gives significant control of resources distribution to building level administrators


Colorado Department of Education. Teachers by district, ethnicity/race and gender. Retrieved from www.cde.state.co.us/cderevl/rv2009StaffDatalinks.htm


*Edgewood v. Kirby* (777 S.W.2d 391, 1989)


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*Pauley v. Kelley*, 255 S.E. 2d 859, 1979;


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*Thompson v. Engelking,* (96 Idaho 793, 537 P.2d 635 1975)


Appendix A

Survey Instrument

Participation in this study should take about 15 minutes of your time. Participation in this project is strictly voluntary and will have no bearing on your teacher evaluation. We respect your right to choose not to answer any questions that may make you feel uncomfortable, and you may discontinue the survey at any time. Your responses will be anonymous, so no one will be able to connect your identity with the information you give. Please do not write your name anywhere on the questionnaire. Your return of the questionnaire will signify your consent to have your responses included in this study.

School Funding Questionnaire

Part A

Please circle the letter that represents your response, or fill in the blanks.

1. Are you:
   a. Male
   b. Female

2. I am ____________ years old.

3. I have been in the education profession for ____________ years.

4. At what level do you teach?
   a. Elementary (Grades k-5)
   b. Middle (Grades 6-8)
   c. High (Grades 9-12)

5. What is the highest degree you have completed?
   a. Bachelor’s degree
   b. Master’s degree
   c. Doctorate degree

6. Do you ever supplement materials and supplies in your classroom with your own money, grants, or by other means?
   a. Yes
   b. No

7. Do you currently have children of school age (k-12)?
   a. Yes
   b. No
8. What is your total household income, including all earners in your household?
   a. Less than $30,000
   b. $30,000 - $49,000
   c. $50,000 - $69,000
   d. $70,000 - $89,000
   e. $90,000 - $109,000
   f. $110,000 - $129,000
   g. $130,000 - $149,000
   h. More than $150,000

Part B
Please indicate your degree of agreement with each statement below by circling the appropriate item on the five-point scale:

9. The Colorado school finance system provides the money required to get all, or nearly all, students achieving at a proficient level or higher on the CSAP.
   1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

10. A school finance system should primarily allocate money and other resources directly to schools based on individually calculated student need.
    1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

11. A school finance system should allocate more money and resources to minority and low-income students.
    1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

12. Additional money and resources allocated directly to classrooms will improve student achievement.
    1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

13. I would be willing to pay more taxes to improve the academic achievement of minority students and low-income students.
    1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree
14. School finance systems which are based on student need would result in poorer schools receiving more money and resources than before and wealthier schools receiving less than before.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

15. If more money and resources were allocated to students based on need, my local school district would lose some state funding.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

16. Those in my community would be willing to pay more taxes to improve the academic achievement of minority students and low income students.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

17. School-based councils that include parents, teachers, and principals should be created to work together at the local level to make decisions regarding the allocation of money and resources.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

18. There should be a law requiring money and resources generated by a particular student to follow that student to the school he or she is attending.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

19. Local taxes are a good way to fund public schools because it gives citizens control over their own school system.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

20. State taxes are a good way to fund public schools because they are generally stable in nature.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree
21. Colorado should continue the practice of “override” in which a district with enough property wealth, along with voter approval, can raise and spend more property tax revenues on their local school district than is authorized by the state.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

22. Some of the tax revenue raised in wealthy areas should be shared with less wealthy areas.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

23. People who move to an area because it has good schools should not have to pay to help the schools in less-wealthy areas.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

24. The courts should play a role in deciding whether the state’s school finance system is adequately funded.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

25. The courts should play a role in deciding whether a school finance system is inadequate even in cases where the legislature and the voters have determined the current school finance system is adequate.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

26. Rank the levels of government on effectiveness at ensuring funding that provides additional money and resources to those districts with the neediest students (1 to 3, with 1 being the most effective).

_____ Federal
_____ State
_____ Local
27. Rank the levels of government on effectiveness at ensuring districts reallocate money and resources so that more money goes to those schools with the neediest students (1 to 3, with 1 being most effective).
   _____ Federal
   _____ State
   _____ Local

28. Rank the levels of government on capability for sound fiscal management (1 to 3, with 1 being most capable).
   _____ Federal
   _____ State
   _____ Local

29. Rank the branches of government on which is best equipped to make decisions about the adequacy of school funding systems (1 to 3, with 1 being most equipped).
   _____ Executive
   _____ Judicial
   _____ Legislative

30. Do you own property in the district in which you teach?
   a. Yes
   b. No

31. How would you describe your political views?
   a. Very conservative
   b. Conservative
   c. Moderate
   d. Liberal
   e. Very liberal

32. Are you a member of your local teachers’ union?
   a. Yes
   b. No
Appendix B

Expert Questionnaire

Research Question:

What are teacher perceptions of the factors that influence support for an adequacy model of school funding?

Survey Format:

Part A - *Demographic Section* includes closed format items to acquire information regarding respondent’s gender, age, years in the profession, teaching level, highest degree, the need to supplement financially within their classrooms, whether the participant has children of school age, owns property in the district in which they teach, direction of political views, and union membership.

Part B – *Factors Section* includes Lickert scale and ranking items that address different factors that influence support for an adequacy model of school funding. Each of the five sub-sections addresses a different factor. I have briefly described for you each factor before listing its associated items. The five factors are: general support for adequacy, tradeoffs, local control represented by the democratic virtues of local governance, localism as a means of separating people and resources, and judicial involvement.
Please note that although the items are the same, the physical manner in which the survey is represented here is different than how it will be presented to participants.

**Validation Process:**

1. Since Part A is general demographic information, please read this section with an eye for ambiguous language. Document your comments or suggestions in the space to the right of each item.

2. For Part B, a brief description (shaded in gray) is given for each of the factors influencing support for an adequacy model of school funding. Each description is followed by associated survey items. Please read each item for the following:

   a. Relevancy to the objective of the instrument which is to determine teacher perceptions of the factors that influence support for an adequacy model of school funding. This can be answered as yes or no.

   b. Clarity of language followed by any suggestions you may have to make the item less ambiguous.

**PART A**

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Comment</th>
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</thead>
<tbody>
<tr>
<td>1 Are you:</td>
<td></td>
</tr>
<tr>
<td>a. Male</td>
<td></td>
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<tr>
<td>b. Female</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>I am ____________ years old.</td>
</tr>
<tr>
<td>3</td>
<td>I have been in the education profession for __________ years.</td>
</tr>
</tbody>
</table>
| 4 | At what level do you teach?  
   a. Elementary (Grades K-5)  
   b. Middle (Grades 6-8)  
   c. High (Grades 9-12) |
| 5 | What is the highest degree you have completed?  
   a. Bachelors degree  
   b. Masters degree  
   c. Doctorate degree |
| 6 | Do you ever supplement materials and supplies in your classroom with your own money, grants or by other means?  
   a. Yes  
   b. No |
| 7 | Do you currently have children of school age?  
   a. Yes  
   b. No |
| 8 | Do you own property in the district in which you teach?  
   a. Yes  
   b. No |
| 9 | How would you describe your political views?  
   a. Very conservative  
   b. Conservative  
   c. Moderate  
   d. Liberal  
   e. Very Liberal |
PART B

- Fifteen items in this section are Likert scale items and use the following scale:
  1-Stongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree
- Four items ask participants to rank the levels of government.
- Shaded portions represent descriptions of the factors and are not survey items.

<table>
<thead>
<tr>
<th>Factor Items</th>
<th>Relevancy to the Objective of the Instrument (indicate either yes or no)</th>
<th>Suggestions for Language Clarity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support</strong> – <em>The following items focus on support for the general concept of adequacy funding which can broadly be defined as providing additional resources for the neediest students.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The Colorado school finance system provides the money required to get all, or nearly all, students achieving at a proficient level or higher on the CSAP.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>A school finance system should primarily allocated money and other resources directly to schools based on individually calculated student need.</td>
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<td>13</td>
<td>A school finance system should allocate more money and resources to minority and low-income students.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Additional money and resources allocated directly to classrooms will improve student achievement.</td>
<td></td>
</tr>
<tr>
<td><strong>Tradeoffs</strong> - According to work done by Brian Shelly, national and state polls general indicate that the public, in theory, favors the idea of equity funding and even favors the means by which it could occur. However, when faced with real tradeoffs (increased taxes and/or unequal distribution of resources, etc.) support for the idea of equity quickly diminishes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I would be willing to pay more taxes to improve the academic achievement of minority and low-income students.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>School finance systems which are based on student need would result in poorer schools receiving more money and resources than before and wealthier schools receiving less than before.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>If more money and resources were allocated to students based on need, my local school district would lose some state funding.</td>
<td></td>
</tr>
<tr>
<td><strong>Localism - Democratic Virtues of Local Governance</strong> – Localism is often cited as a reason why school finance reform is unsuccessful. Here, localism refers to how individuals feel about the democratic advantages of smaller, local governance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

126
School-based councils that include parents, teachers, and principals should be created to work together to make decisions regarding the allocation of money and resources.

There should be a law requiring money and resources generated by a particular student to follow that student to the school he or she is attending.

Rank the levels of government on effectiveness at ensuring funding that provides additional money and resources to those districts with the neediest students. (1 to 3, with 1 being the most effective)

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>State</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Rank the levels of government on effectiveness at ensuring districts reallocate money and resources differently to reflect more money going to those schools with the neediest students. (1 to 3, with 1 being the most effective)

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>State</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td></td>
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</tbody>
</table>

Rank the levels of government on capability for sound fiscal management. (1 to 3, with 1 being the most capable)

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>State</th>
<th>Local</th>
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</thead>
<tbody>
<tr>
<td>20</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Localism – Separation of People and Resources - Here, localism
refers to the use of local power to make decisions that maintain the current system and allow for the continued separation of people and resources.

23 Local taxes are a good way to fund public schools because it gives citizens control over their own school system.

24 Colorado should continue to provide taxpayers with an override option that allows wealthier districts to raise more money.

25 Some tax revenue raised in wealthy areas should be reallocated to less-wealthy areas.

26 People who move to an area because it has good schools should not have to pay to help the schools in low-income areas.

Judicial Involvement – Another factor that could affect support for an adequacy model of funding is the perception that the courts should not be involved in decisions that have traditionally been the responsibility of the legislature.

27 The courts should decide on whether the state’s school finance system is adequately funded.

28 The courts should decide whether a school finance system is inadequate even in cases where the legislature and the voters have determined the current school finance system is
adequate.

29
Rank the branches of government on which is best equipped to make decisions about the adequacy of school funding systems. (1 to 3, with 1 being the best equipped)

_____Executive    _____Judicial
_____Legislative

Do you consider this section of the instrument valid for measuring teacher perceptions of the factors that influence support for an adequacy model of school funding?

Please list any suggestions you might to improve the effectiveness of the survey instrument?
Appendix C

Introduction Letters, Permission Letters, Information Sheets

Superintendent Introduction Letter

Montrose County School District RE-1J
930 Colorado Avenue
P.O. Box 10,000
Montrose, CO 81402-9701

Dear Superintendent X:

As a doctoral student at the University of Denver, I am required to conduct an independent research project that adds to the body of knowledge in the field of education. As a result of my strong interest in policies surrounding school finance, I’ve chosen to examine teacher perceptions about the factors that influence support for an adequacy model of school funding. The results of this study have the potential to inform public policy, increase public awareness, and foster support for adequacy funding.

I am requesting permission to survey teachers in the Montrose and Olathe schools. Their perspective is critical in determining those factors that may enhance or inhibit support for funding that looks to channel resources to the districts and schools that have the neediest students. The enclosed instrument has been designed to obtain all the necessary information while requiring a minimum of time. The average time for teachers who agreed to take the survey is approximately 15 minutes.

With your permission I would like to contact school principals from your district to arrange a time that is convenient for the administration of the survey. All data collected will remain anonymous. Informed consent procedures for the study are described on the enclosed sheet. I will contact you to obtain official permission and discuss any questions you might have regarding the study. For your information, the project is being supervised by Dr. Kent Seidel, Education Department, University of Denver, Denver, CO 80208, 303-871-2496, kent.seidel@du.edu. If you have any concerns or complaints, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-871-4052 or write to either at the University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

Thank you in advance for your cooperation and participation in the study.

Sincerely,

Nancy Alex
Doctoral Student, University of Denver
Superintendent Permission Letter

Date ______________________

I, ________________, Superintendent of Montrose County School District RE-1J have read the introduction letter as well as the information sheet and give Nancy Alex permission to conduct the research study entitled, “Teacher Perceptions of the Factors that Influence Support for an Adequacy Model of School Funding.” She has permission to survey teachers at all three instructional levels (elementary, middle, and high school).

_________________________________
Signature
Dear Principal X:

As a doctoral student at the University of Denver, I am required to conduct an independent research project that adds to the body of knowledge in the field of education. As a result of my strong interest in policies surrounding school finance, I’ve chosen to examine teacher perceptions about the factors that influence support for an adequacy model of school funding. The results of this study have the potential to inform public policy, increase public awareness, and foster support for adequacy funding.

I am requesting permission to survey teachers at Middle School X. Their perspective is critical in determining those factors that may enhance or inhibit support for funding that looks to channel resources to the districts and schools that have the neediest students. The enclosed instrument has been designed to obtain all the necessary information while requiring a minimum of time. The average time for teachers who agreed to take the survey is approximately 15 minutes. All data collected will remain anonymous. Informed consent procedures for the study are described on the enclosed sheet. I would like to contact you by phone or email to arrange a time that is convenient for the administration of the survey.

I will personally contact you to obtain official permission and discuss any questions you might have regarding the study. This project is supervised by Dr. Kent Seidel, Education Department, University of Denver, Denver, CO 80208, 303-871-2496, kent.seidel@du.edu. If you have any concerns or complaints, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-871-4052 or write to either at the University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

Thank you in advance for your cooperation and participation in the study.

Sincerely,

Nancy Alex
Doctoral Student, University of Denver
Principal Permission Letter

Date ______________________

I, ______________, principal of Middle School X have read the introduction letter as well as the information sheet and give Nancy Alex permission to conduct the research study entitled, “Teacher Perceptions of the Factors that Influence Support for an Adequacy Model of School Funding,” with the teachers at my school.

_________________________________
Signature
Information Sheet

You are invited to participate in a study that will examine teachers’ perceptions of the factors that influence support for an adequacy model of school funding. In addition, this study is being conducted to fulfill the requirements to complete a doctorate program. The study is conducted by Nancy Alex. Results will be used to inform public policy and build campaigns to increase public awareness and develop strategies that foster support for adequacy funding. Nancy Alex can be reached at 970-275-6570 or nalex@mcsd.k12.co.us. This project is supervised by Dr. Kent Seidel, Education Department, University of Denver, Denver, CO 80208, 303-871-2496, kent.seidel@du.edu.

Participation in this study should take about 15 minutes of your time. Participation will involve responding to 32 questions about factors that enhance or inhibit support for adequacy models of school funding. Participation in this project is strictly voluntary and your choice to participate or not to participate will have no bearing on your teacher evaluation. The risks associated with this project are minimal. If, however, you experience discomfort you may discontinue your participation at any time. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty.

Your responses will be anonymous. That means that no one will be able to connect your identity with the information you give. Please do not write your name anywhere on the questionnaire. Your return of the questionnaire will signify your consent to participate in this project.

If you have any concerns or complaints about how you were treated during the interview, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-871-4052 or write to either at the University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

You may keep this page for your records.