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## ABSTRACT

School finance issues are of paramount concern to all levels of the education system of the Southwestern Region of the United States. As expectations rise for students and teachers to perform at higher levels and for schools to guarantee the success of all students, the question of how best to support this reform through fiscal measures becomes even more critical. This study, conducted by the Southwest Educational Development Laboratory, will examine fiscal resource allocation in relation to student performance in public school districts across this region. It will be designed to answer the following four questions: (1) What are the expenditure patterns over time in school districts across varying levels of student performance? (2) How do improving school districts allocate their financial resources? (3) What allocation practices have improving school districts implemented that they identify as innovative and effective? (4) What barriers and challenges have improving school districts faced in allocation practices? The results of this study will provide state and local decision-makers with information and strategies for improving the allocation of financial resources to support greater student success. Appendix A includes a data-sources matrix, interviewer guidelines, focus-group guide, letter to survey recipients, and sample survey. (Contains 41 references.) (RT)

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# Allocation Study of Educational Resources in the Southwestern Region

## Research Design

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# **Allocation Study of Educational Resources in the Southwestern Region**

## **Introduction**

The Southwest Educational Development Laboratory (SEDL) is conducting research to help inform policymakers about key issues in the region as part of its Regional Education Laboratory work. This study represents the first of three regional policy research projects that SEDL will conduct, and examines fiscal resource allocation using data available from the Southwestern Region.

### **Problem Statement**

Based on discussions with the chief state school officers in SEDL's region and with other policymakers and policy influencers, SEDL selected school finance as an area in which research-based information is needed. School finance issues are of paramount concern to all levels of the education system--national, state, district, and school. As expectations rise for students and teachers to perform at higher levels and for schools to guarantee the success of all students, the question of how best to support this reform through fiscal measures becomes even more critical. State policies and dollars support school funding and greatly affect school and district spending practices. Statewide finance systems along with other reform efforts can be used to direct resources to support student performance.

Nationally, education expenditures per-pupil demonstrated consistent and rapid growth between 1960 and 1990 (Odden & Busch, 1998, p. 7; Picus & Fazal, 1995, pp. 2-3). In the first half of the 1990s, per-pupil expenditures flattened, and then rose again starting in 1996-97. Expenditures are projected to rise by 38% (in constant dollars) between 1997-98 and 2009-10,

according to middle projections<sup>1</sup> estimated by the National Center for Education Statistics (U.S. Department of Education, 2000, p.118).

Attention in the school finance policy arena during the three decades from 1960 to 1990 focused heavily on equity issues as states attempted to address the disparity of education resources within and among districts. Current attention has shifted somewhat to focus on the continuing rise in performance standards and the expectation for adequate resource support for student achievement. Current research describes how districts distribute their resources and new research has begun to explore school-level resource reallocation practices in an attempt to better understand the relationship between resource-related inputs and student outcomes.

National data also indicate the significance of federal and state dollars as a percentage of total education funding. On average, public elementary and secondary schools receive more than half of their revenues from state and federal sources, while local funds comprise a smaller portion of total dollars (U.S. Department of Education, 2000). The fiscal spending pattern in SEDL's five-state region is consistent with this national trend. As shown in Table 1, per-pupil expenditures in the Southwestern Region in 1997 ranged from a high of \$5,910 in Texas to a low of \$4,964 in New Mexico, with state and federal funds comprising more than half of each state's funding. The local fund share in all of the states, except Texas (45.8%), was well below the national average, i.e., from 12.3% in New Mexico to 35.9% in Louisiana compared to 42.3% nationally. Federal funds are particularly important to states in the Southwestern Region with every state receiving more than the national average share. The concentration of poor children in the region largely drives that statistic.

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<sup>1</sup> The U. S. Department of Education calculates three sets of projections. One is conservative and estimates low expenditure growth, one is aggressive and estimates strong expenditure growth. The third is the middle projection level, an estimate of growth between the low and high estimates.

Table 1. Real Per-Pupil Expenditures in Average Daily Attendance (Five-State Region and National Averages, 1997-98)

	Arkansas	Louisiana	New Mexico	Oklahoma	Texas	National Average
Per-pupil expenditures <sup>2</sup>	\$4,999	\$5,645	\$4,964	\$5,389	\$5,910	\$6,662
State share <sup>3</sup>	57.7%	50.4%	72.2%	61.6%	44.2%	48.4%
Federal share <sup>2</sup>	10.8%	11.3%	13.2%	8.6%	7.6%	6.8%
Local share <sup>2</sup>	26.0%	35.9%	12.3%	24.5%	45.8%	42.3%

Between 1987 and 1998, the proportion of state contributions to education funds declined slightly from 49.5% to 48.4%, but states continued to play a dominant role in school funding and decision-making. For example, state policy directs curriculum development, standardized testing, state accountability systems, and teacher certification. As state decisionmakers consider how to guide schools and districts in reform efforts that increase efficiency in spending and student performance, they must consider a range of issues such as revenue adequacy, teacher assignment, school-based decisionmaking, and incentives for improved performance. The research outlined here will support SEDL’s goal to create and disseminate research-based knowledge to transform low-performing schools and districts into high-performing learning communities (SEDL, 2000a) and will touch on all these important aspects of resource allocation.

Recently, SEDL completed a study of resource allocation in Texas (SEDL, 2000b). That work guides the current study in two important ways. First, key findings indicate that schools at varying levels of student performance allocate resources differently. This finding should be

<sup>2</sup> U.S. Department of Education, National Center for Education Statistics (NCES, 2000). *Digest of Education Statistics 2000*. Table 168, April 4, 2001, <http://nces.ed.gov/pubs2001/digest/dt168.html>

<sup>3</sup> U.S. Department of Education, National Center for Education Statistics (NCES, 2000). *Digest of Education Statistics 2000*. Table 159, April 4, 2001, <http://nces.ed.gov/pubs2001/digest/dt159.html>

tested within other states in the region to move toward a deeper understanding of how districts spend money and how different spending patterns may be linked to student achievement.

Second, the strategies, attitudes, and experiences of school districts with regard to resource allocation were found to be unique and many times innovative. An in-depth study of districts would reveal useful information about resource allocation practices for practitioners and education policymakers, especially those seeking change in low-performing schools and districts.

SEDL researchers expect the study will support the knowledge base around resource allocation to help inform state, district, and school decisions in these areas, particularly as they relate to effective allocation of financial resources to support student achievement.

### **Purpose of the Study**

The purpose of this study is to examine resource allocation in relation to student performance in public school districts across the Southwestern Region. Through the analysis of existing data collected and reported by the states, the study will explore within- and across-district differences in fiscal spending in relation to varying levels of student achievement. The research results will also shed light on the effects of state policies related to the adequacy of funding for school districts. SEDL will assess patterns in resource allocation practices and challenges related to high student performance through in-depth studies of school districts that have exhibited consistent, sustained performance improvement over time. The results of this study will provide state and local decisionmakers with information and strategies for improving the allocation of financial resources to support greater student success.

### **Definition of Terms**

Researchers will use these definitions:

**Expenditures**—The amount of education money spent by schools, districts, and/or states for school needs (functions, objects, and programs).

**Improvement school district**—A school district that has exhibited consistent, sustained student performance improvement for the previous four years on norm- or criterion-referenced standardized test scores or as identified by state education agency staff.

**Low-/mid-/high-performing school district**—A school district’s performance level as designated by the state’s accountability system and/or state officials. In cases where existing designations are not available, researchers will use student achievement data from each state to develop definitions for the purpose of this study.

**Procedural knowledge**—Research-based information that will assist state and local decisionmakers in improving student success.

**Resource allocation**—The ways in which revenues are divided among competing school needs and expended for educational purposes, and the educational structures that affect this spending. This study will use NCES Common Core of Data expenditure categories: instruction, support services, non-instructional services, facilities acquisition and construction services, and other expenditures.

## **Research Questions**

The four research questions guiding this study were designed to help pursue SEDL’s interest in knowing how school districts allocate their resources and in better understanding the practices and challenges associated with effective spending. Implicit in each of the four questions is a focus on resource allocation and student performance and the ways in which school districts

spend money and make allocation decisions that might improve or sustain student success.

Various research methods and data sources will help to answer the research questions:

1. What are the expenditure patterns over time in school districts across varying levels of student performance?
2. How do improvement school districts allocate their financial resources?
3. What allocation practices have improvement school districts implemented that they identify as innovative and effective?
4. What barriers and challenges have improvement school districts faced in allocation practices?

### **Significance and Limitations of the Study**

SEDL hopes the results of the study will validate the understanding that using resource allocation to support systemic school reform will best serve the success of students. The findings of this type of study can contribute to efforts in school reform.

Significance of the study. This study will benefit researchers, policymakers, and practitioners in various ways:

- Addressing the link between resource allocation patterns and student performance will fill a gap in the current research base. Results will help further the dialogue on how and whether spending impacts student success.
- The study's focus on district and school resource allocation practices within a state context will provide a regional perspective pursued in relatively few studies on resource allocation.

- The data sought will validate the understanding that using a systemic approach to resource allocation will best serve the success of students.
- Targeting the sample selection to states and districts in SEDL's five-state region will enable researchers to provide information to policymakers and practitioners that incorporates unique regional characteristics and needs.
- The dissemination of research results will increase the understanding of resource allocation for a diverse audience (policymakers, policy influencers, researchers, educators, and others interested in school finance and/or student performance).
- The combined use of quantitative and qualitative methodology will contribute to strong results with increased generalizability of the findings. It further strengthens the reliability of the results and the ability to interpret findings through an understanding of state and district context.

Limitations of the study. The limitations of this study, as listed below, present issues for interpretation of the results and future research in this field:

- The finance and budget definitions, standardized tests, performance standards, and accountability ratings vary from state to state and district to district in some instances. These differences will make comparisons within the region difficult and reduce the validity of such comparisons.
- The reliance on secondary data sources (existing administrative datasets) may limit the accuracy and standardization of information that may reduce the validity and reliability of the results.
- The number of school districts varies across the states with some having a small number from which to ascertain data that may limit the generalizability of the research.

Additionally, the lack of availability or willingness of improvement school districts to participate may impede the selection of a representative sample.

- Contradictory results may emerge from site visits, further limiting the generalizability of the findings and the development of procedural knowledge.

## Literature Review

### **Theoretical Perspective**

SEDL advocates the implementation of a systemic approach to education in which states, districts, and schools address multiple problems at multiple levels along with myriad challenges unique to their communities. A critical component in this systemic approach is the effective use of financial resources. As education systems are redesigned to create high performance in all schools, finance systems must also be redesigned for greater efficiency and effectiveness (Odden & Busch, 1998, p. 24). Recent trends support this need for considering financial structures in school reform.

- The funding of education has experienced tremendous growth in the past 40 years. However, increased student performance has not accompanied the influx of money into the educational system (Hanushek, 1994; Odden & Busch, 1998, pp. 2-18).
- Although the disparities are declining, current finance structures are still plagued by inequities where money is distributed unevenly across states, districts, and schools (Hussar & Sonnenberg, 2000; Parrish & Hikido, 1998; U. S. General Accounting Office, 1997).
- Efforts to reduce class size, appropriately fund programs for disadvantaged students, and update teacher compensation systems require additional funding. The funding necessary

for these expenses is not likely to come from large increases in state funds. Resources are more likely to come through new approaches to allocation. Decisionmakers have an enormous challenge to spend the funds they do have much more efficiently (Hanushek, 1994, pp. 24-49; Odden & Archibald, 2001, pp. 61-65; Picus, 2001, pp. 28-58; Picus & Fazal, 1995).

Research efforts in recent decades have helped broaden our understanding of the role of school resources and how their distribution and use might be improved. This study draws from existing knowledge in three areas: evidence gathered on resource allocation and patterns, research pursued to understand the linkage between financial resources and student performance, and insight on effective spending practices.

### **Resource Allocation**

Current resources can and must be used better if ambitious education reform goals and student performance improvement are to be achieved. Research has produced a great deal of information about how dollars are distributed to school districts but insufficient data on how to put dollars to productive use (Picus & Fazal, 1995, p. 81). From recent studies, we know that at least 80% of most school district budgets are spent at and within school sites for a wide range of student services such as instruction, school leadership, counseling services, supplies, and materials (Odden & Archibald, 2001, p. 61). The remaining expenditures support the superintendent's office, tax collection, insurance coverage, and other business and operating expenses. Also well established is the fact that spending for instruction represents about 60% of state and local operating expenditures (Odden & Busch, 1998, p. 18; Picus, 2001, pp. 33; Picus & Fazal, 1995, p. 82). High-spending districts, generally, spend a little more for instruction in percentage terms than low-spending districts, although there are exceptions (Adams, 1997;

Hartman, 1988). Researchers find that school districts are basically consistent in the way they allocate resources (Miles & Darling-Hammond, 1998). When funding levels rise due to state aid or property tax increases, districts use operating funds primarily for smaller class sizes and teacher pay increases (Picus & Fazal, 1995, p. 95). When more program (or categorical) funds are available, districts enhance instructional programs with new technology, teacher aides, and professional development linked to the program.

Some researchers have begun to examine resource allocation in districts undergoing reform to see if new reform ideas also change thinking about resources. So far, they have learned that reform-oriented districts continue to retain control over most operating resources rather than decentralizing allocation decisions to the school or classroom.

At the school level, even reform-minded districts generally limit school budget authority to Title I and compensatory education funds, professional development funds, and grant resources (Goertz & Duffy, 1999, p. 239). Reform-oriented schools allocate those funds to improve instruction, using student performance data to make decisions. They tend to hire aides to increase instructional capacity. In part, this approach reflects the magnitude of student need in reading instruction, special education, and English language instruction where small-group and individualized instructional support is believed to be necessary. Goertz and Duffy found that schools with budget authority and flexibility spent their resources in the same way as schools with limited flexibility (p. 240). Research that resulted in different findings comes from Miles and Darling-Hammond (1998) who report that urban high schools with strong student achievement that have departed from traditional approaches share six resource allocation strategies. These six strategies are: 1) provide teachers with more generalized roles and reduce specialized programs, 2) use flexible student grouping, 3) organize the school to support stronger

personal relationships between students and teachers, 4) provide more common planning time for teachers, 5) implement longer instructional time blocks, and 6) make creative use of the school day and staff.

Recently published work from the Consortium for Policy Research in Education describes what schools do to reallocate resources in response to higher standards. Researchers emphasize the complex large-scale change process required, the need to address the regular instructional program as well as special programs, and the resource requirements of various strategies found to be productive in helping student academic performance. Their work concludes with strategies schools can use to pay for new education programs. These include reallocating resources from pull-out programs to regular classes, increasing planning time with innovative scheduling, expanding roles for teachers, and reducing the number of pupil support specialists (counselors, social workers, etc.). In short, the strategies they offer focus on resource reallocation by staffing categories (Odden & Archibald, 2001, pp. 59-73).

### **Financial Resources and Student Performance**

The link between resources and student performance has been investigated in depth by economists and educational researchers for several decades using methods designed to explain and quantify an educational “production function.”<sup>4</sup> A production function would describe the important and powerful variables contributing to student performance outcomes like test scores or high school graduation.

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<sup>4</sup> Educational production functions are mathematical descriptions of how inputs (independent variables) contribute to outcomes (dependent variables). The production function is most often expressed in the form of a linear equation that relates student outcomes (test scores) to characteristics of schools (expenditures, teacher experience, class size), individual student characteristics (family income level, mother’s education, race), and previous performance. Linear regression is used to estimate the combined strength of the inputs in contributing to the outputs. Regression also provides coefficients for each independent variable in the equation. The coefficient provides a measure of the strength and direction (positive or negative) of its contribution to the output.

Production function studies. One of the early studies using production functions resulted in the path breaking “Coleman Report” (Coleman, et al., 1966). A key finding of the study was the weak association between school resources and student performance. Coleman and his associates found, instead, that family background characteristics had a large and statistically significant effect on student performance. Hundreds of studies of education production have been conducted since the release of the Coleman Report, and their results have been mixed. Hanushek (1986, 1997) summarized the results of hundreds of production function studies only to conclude that he could find no systematic, positive relationship between school resources and student performance. Hedges and his colleagues used a different technique, meta-analysis, for summarizing the results of the same studies Hanushek examined. They concluded that the relationship between resource inputs and student outcomes was consistent and positive and could be used to frame educational policy (Hedges, Laine & Greenwald, 1994). They expanded their data collection and analysis in a subsequent study and reported that “a broad range of school inputs are (sic) positively related to student outcomes, and that the magnitude of the effects are (sic) sufficiently large to suggest that moderate increases in spending may be associated with significant increases in achievement” (Greenwald, Hedges, & Laine, 1996, p. 362).

Recently, other researchers have been able to identify some ways in which money matters in the production of student learning. Grissmer and his colleagues report that “money directed toward educational services for minority and disadvantaged students brings higher achievement scores” (Grissmer, Flanagan & Williamson, 1998, p. 28). Using an experimental study design within Tennessee schools, researchers examined ways in which increased resources were used. They found that smaller class sizes and employment of better-educated and more experienced

teachers made a positive difference for low-income and minority students (Grissmer et al., 1998; Krueger, 1998).

Other lines of research suggest there is more to be learned about how money matters in public schools by looking closely at schools and districts (Monk & Rice, 1999). One study found a high degree of internal variation across school districts in how teacher resources are distributed to schools (Monk & Hussain, 2000). In another study, Ballou (1998) looked exclusively at urban school districts, examining parent choice, use of substitutes, and teacher salaries. He found that none of these resource-intensive policies were particularly effective. The implication from this line of research is that urban school decisionmakers may be able to reallocate resources more efficiently than they are doing using current policies. These studies point to the need to examine data generated by districts and schools, as well as large national data sets, to identify alternatives for allocating resources (Monk & Hussain, 2000). These findings also suggest that studying resource distribution can still yield results that will help state and local policymakers improve schooling for all children through the productive use of resources.

Costs studies. Another line of inquiry used to study fiscal effectiveness is cost analysis. Cost analysis has two purposes. One is to accurately identify all the costs associated with complex systems such as schools or programs of instruction. Knowing the actual costs helps policymakers assess the adequacy of education resource levels. The other purpose is to provide an approach or method for choosing among alternatives that give the desired results. In other words, costs can be linked to program outcomes or student performance. The Resource Cost Model or RCM (Chambers & Parrish, 1994) is an approach to identifying and pricing education inputs. With guidance from groups of educator experts, the RCM approach identifies base staffing levels for regular programs and then identifies effective program practices and staff and

resource needs for special programs, such as compensatory education, special education, and bilingual education. The model uses average input prices and analysts adjust the total cost by a regional price or cost index. This method can result in a base funding (or foundation) cost level that can guide decisionmakers (Chambers, 1995). The advantage of an approach like RCM is that it identifies a set of elements that each district or school would be able to purchase including resources for special needs. The disadvantage is that there is little connection to student performance. Other models use an economic cost function approach (Reschovsky & Imazeki, 1998) to adjust for “adequate” performance and cost analyses keyed to high-performing schools (Odden & Picus, 2000, p. 73).

Cost studies that permit policymakers to understand both the costs and likely outcomes of alternative ways to reach student performance goals are categorized as cost-benefit and cost-effectiveness studies (Levin, 1988). Economists believe that resource allocation can be improved when both the costs and likely outcomes of reaching goals are understood (Levin & McEwan, 2001). A program to improve student reading achievement may, when implemented, be dramatically successful. But if the program is fifty percent more successful and twice as expensive as a related program, policymakers will want to deliberate very carefully before they allocate resources to the more costly program.

The cost analysis portion of cost-benefit and cost-effectiveness analysis requires researchers to identify all the costs of a program, including training, administrative costs, the contributions of volunteers, and other program elements that are typically ignored when school districts decide to allocate resources to new programs. The benefits must also be estimated, using the best instruments for measuring outcomes. Studies that provide only a regression coefficient (as in production function research) or program effect sizes (how much student learning

increases, independent of cost considerations) do not provide enough information (Levin, 1988, p. 65). Some school finance experts believe resource allocation decisions should be made by considering the costs and outputs of alternatives as well as general policy considerations suggested by production function study approaches (Rice, 1997; Tsang, 1997).

### **Effective Practices**

Resource allocation studies suggest promising practices for states, districts, and schools. Hanushek (1994) takes the position that education decisionmakers should be disciplined to examine their practices through evaluation and cost-effectiveness analysis. He suggests that, in the absence of evidence about which inputs affect student performance, schools should use incentives to stimulate improvement. Performance incentives for innovative practices like parental choice and incentives to target programs more effectively to student needs are some of his recommendations. A study of urban high schools in New York suggests that policymakers should support the creation of smaller high schools because the cost per student of small and large academic high schools, excluding vocational-technical schools, is similar (Stiefel, Berne, Iatarola & Fruchter, 2000). Numerous studies suggest that resource allocation for low pupil-teacher ratios will improve performance, at least for poor and minority students (Grissmer et al., 1998; Picus, 2001, pp. 66-70). A study using Texas state data concluded that smaller class sizes in elementary schools improve student performance (Ferguson, 1991). A more recent study in Tennessee comes to a similar conclusion about class size and notes that reliance on aides rather than certified teachers to reduce class sizes may not be effective (Krueger, 1998). A study conducted in Austin, Texas, found that more resources devoted to smaller classes did not, by themselves, improve performance. Schools needed to understand their unique problems by studying student performance data; providing incentives for teachers, students, and parents;

training teachers; and measuring and reporting progress (Murnane & Levy, 1996, p. 225).

Reorganizing schools using new design ideas, such as the New American Schools designs, and restructuring school time can also produce learning gains (Picus, 2001, p. 71). Clearly there are methods of productively using resources in schools and districts that merit study.

Ambitious student achievement goals will be difficult to accomplish without a deeper understanding of effective resource allocation. The purpose of this study is to provide additional insights into this problem.

### **Questions For Further Study and Link to Goal of SEDL study**

A key finding from the Panel on the Economics of Educational Reform poses an apparent paradox in school finance: inflation-indexed per-student funding for education has increased over the past half-century, yet overall student performance, measured by standardized tests, has remained flat (Hanushek, 1994, p. 38-41). This finding has puzzled researchers for many years and resulted in investigations that attempt to single out the effects of resource increases on different types of students. Recent research suggests that spending directed toward efforts such as smaller class size, kindergarten education, better-educated teachers, and more experienced teachers make a difference to some students (Grissmer et al., 1998, p. 28).

Looking ahead, it is apparent that student achievement will need to improve dramatically if all students are to have equal access to good jobs and secure futures. The goal of standards-based reform is very ambitious (Odden & Busch, 1998, p. 4). The challenge is to use current and future funds more effectively. It is a daunting task and poses new types of education reform questions. Rather than justifying requests for more money, the issue is how more achievement can be produced with resources roughly at current levels.

This situation brings attention to the complexity of the relationship among fiscal resources, student success, and the difficulties that states, districts, and schools face in implementing reform efforts. It also reveals avenues of further study and analysis, including investigations of adequacy and efficient alignment of resources. Researchers need opportunities to investigate spending patterns of successful and unsuccessful schools and districts. Investigators also need a clearer sense of the challenges and barriers states and districts face and the opportunities they encounter in making good use of resources.

SEDL's research study attempts to gain an in-depth understanding of the spending patterns, resource allocation practices, and challenges of states and districts in the Southwestern Region. Researchers will scrutinize each state's data according to the definitions and rules used within the state. Researchers hope to use the results to create research-based knowledge to support the transformation of low-performing schools and districts into high-performing learning communities. They also hope the findings will help states determine efficient ways to use any additional funds that may result from state or court scrutiny of resource adequacy.

## Methodology

SEDL's REL emphasis is on supporting high levels of achievement for all students in the states of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. To this end, this policy research study proposes to describe resource allocation among and within the states in the region and examine resource allocation in school districts that have improved student achievement over a five-year period. SEDL will conduct an in-depth examination of innovative and effective allocation practices in improvement districts and examine barriers and challenges these school districts face in resource allocation. Researchers will use quantitative and qualitative methods.

Complementary research methods and a variety of data sources will allow researchers to “explain the causal links in real-life interventions that are too complex for experimental strategies” (Merriam, 1988, p. 32). The data sources and analyses used in this study will enhance the description of the relationship between resource allocation practices and student performance in the region that low-performing schools might use to improve student success.

### **Sample Selection**

SEDL will invite all five states in the region to participate in the study. First, researchers will contact the state education chiefs’ offices to solicit their participation in the study and discuss the school finance structures and student performance accountability systems in each of their states. Each participating state will identify low-/mid-/ and high-performing school districts to comprise the study sample. If states are unable to make these determinations, researchers will use student performance data, develop definitions, and identify district performance levels.

Researchers will select a purposive sub-sample of three improvement districts from each participating state to study more intensely. To obtain this sub-sample, state education agency staff and SEDL researchers will identify approximately ten improvement districts in each participating state from the larger population of school districts. SEDL researchers will review performance and demographic data and other pertinent documentation to help select these improvement districts. Researchers will create a priority list of these potential districts using recommendations from state contacts. The districts will be representative of the region and each state. SEDL researchers will contact their superintendents to invite them to participate in the study. As districts decline the opportunity to participate as a site, other districts from the priority list will be invited until the sample of three improvement districts from each state is complete.

To ensure that the improvement districts are representative of SEDL's region, researchers will consider the following selection criteria: representation of both rural and urban areas, poverty of the student population, district wealth (as measured by property value), district demographics, current spending level per student and by function, and race/ethnicity of the student population. Researchers recognize that in order to select a representative sample, improvement districts may include larger urban areas in which student performance improvements have occurred at the school level but are not necessarily reflected in improvements for the district as a whole. In other words, there is likely to be intra-district variation in performance. SEDL will specifically attempt to study a diverse population of rural and urban districts representative of the region and give priority consideration to districts that include Comprehensive School Reform Demonstration (CSRSD) sites.

### **Data Sources**

Examining state-, district-, and school-level practices is critical for understanding patterns of resource allocation; decision-making structures that guide spending; and the fiscal barriers, challenges, and innovations that hinder or support high performance. In order to gain an in-depth understanding of the relationship between resource allocation and student performance, researchers will use existing fiscal databases from state education agencies and school district business offices. Researchers will also use data gathered from interviews, focus groups, surveys, and document reviews to answer the four research questions and provide multiple layers of evidence for the regional analysis. The research team will collect data from educators and administrators through a variety of means such as telephone conversations, web pages, on-site visits, and mailings. A chart showing the relation between research questions and data sources appears in Appendix A.

Existing Databases. A quantitative study of the relationship between student performance and fiscal resource allocation in all school districts across the Southwestern Region will be based on analyzing existing state financial, demographic, and performance data. Researchers will focus on patterns and characteristics of operating expenditures at the district and state levels. They will also develop a description of state and regional demographics to create contextual information for interpreting results. Descriptive and comparative statistics from the existing databases for both expenditure dollars and the percent of spending will be useful in identifying improvement districts and in understanding and analyzing the other data collected.

The research team will first review reports, web site publications and information, policy documents, and legislation to gain background knowledge on state procedures and systems. In particular, researchers will review state funding levels, accountability system descriptions, and state audit and review processes to provide state context for conducting the research.

Researchers will conduct an initial discussion with state education financial experts about data needs and collect information from them on their finance structures. Researchers will collect at least four years (1994/95 through 1997/98) of fiscal, demographic, and performance data for each of the participating states from the Common Core of Data (CCD). Researchers will request CCD submissions for 1998/99 and 1999/00 directly from the participating states. Data elements will include revenue sources and operating expenditures by function (e.g., instruction, administration, facility maintenance and operations) and object (e.g., salaries, professional development, and travel), exclusive of capital outlay and debt services. From state-level sources, researchers also hope to collect program expenditures such as those for regular education, special education, compensatory education, and career and technology education.

Individual Interviews. Researchers will interview approximately four key district- and school-level decision-making personnel in the three improvement districts in each participating state. Interview data will answer how improvement school districts in the region allocate their financial resources, what innovative and effective allocation practices they implement, and what allocation barriers they face. Researchers will ask state and district administrators to nominate potential interviewees. Interview subjects will be identified based on their knowledge and expertise in district and school finance issues and their role in the resource allocation decision-making process. Participants will include state-, district-, and school-level administrators such as: superintendents, directors of instruction, chief financial officers, personnel directors, principals, and other district and/or school personnel as needed.

The research team will develop a structured interview protocol with questions centered on the four research questions in order to gain individual perspectives on resource allocation practices in the improvement districts. Closed and open-ended questions will be constructed with attention to clarity and focus. Researchers will pilot the instruments with at least one improvement district in the study sample. (See Appendix B for draft interview questions.)

Interviews at each district site will be scheduled in advance and conducted by one or more researchers. Each interview will be tape-recorded and the interviewer will write supporting field notes. Additionally, the researcher will write an interview summary upon the completion of each interview capturing main ideas from the interview and field notes. If resources are available, interview tapes will be transcribed to provide a more literal account of the interview dialogue. If transcription services are not feasible, tapes from interviews will provide the source for relevant quotes and main points to be included in the data analysis.

Focus Groups. The purpose of the focus groups is to capture interactive dialogue on resource allocation practices through the lens of school administration and broaden the size and scope of information available from the sample. Trained researchers will conduct one focus group in each state studied. Each focus group will be limited to eight participants from one improvement district in the sample. Focus group participants will include principals or other key school decision-making personnel. Focus group facilitators will encourage participants to exchange strategies and challenges for supporting improved performance through allocation practices. To facilitate this dialogue, they will incorporate a knowledge base of current change processes and management strategies, such as those described by Duck (2001), Hall and Hord (2001), and Hord (1990).

Researchers will develop a focus group protocol of no more than six questions focusing on innovative and effective practices and barriers and challenges relating to resource allocation. The instrument will include open-ended questions constructed to allow participants to respond without limitation, yet provide clarity and focus on the desired topic. Representatives of the intended audience who are not part of the study will review the instrument. (See Appendix B for draft focus group questions.)

Two members of the research team will conduct each focus group, allowing one person to facilitate the discussion and the other to take field notes and observe. Researchers will tape record the group session and develop a summary outlining the key observations. Audiotapes will be transcribed depending upon available resources.

Survey. The purpose of the survey is to obtain a broader, more complete picture of resource allocation practices in improvement districts at the school level. Researchers will disseminate approximately 1,500 surveys, 300 in each participating state, to teachers and other

instructional support staff in the improvement districts studied. The survey will also serve as a data collection tool to obtain information from personnel that are unavailable or not included in individual interviews or focus groups that researchers deem important to answer the research questions.

The research team will develop a survey form to solicit both quantitative and qualitative information. The survey questions will center on the four research questions and will be similar to the information sought in the other methods used in this study. Researchers will craft the survey questions to be concise and easily understood, using open-ended, forced choice, and Likert scale formats. (See Appendix B for the draft survey.) The survey will be piloted with members of at least one improvement district in the sample or reviewed by representatives of the intended audience who are not part of the study.

Document Review. Researchers will obtain relevant state and district laws and policy documents that affect resource allocation decisions. State laws, rules, and fiscal policies will assist researchers in understanding the broader state context for resource allocation. Researchers will collect budgets, improvement plans, annual reports, audits, teacher assignment policies, allocation formulas, and fiscal policies for districts selected for intensive study. They will also collect school improvement plans, organization charts, and schedules during visits to improvement schools during the time interviews are conducted. State and district documents will assist researchers in establishing the context within each state necessary for analysis and interpretation of the data. Documents will also assist researchers in refining draft interview and focus group protocols (see Appendix B). The research team will review collected documents to track processes, outline procedures, and confirm data collected through interviews, focus groups, surveys, and existing financial databases.

## **Data Analysis**

Researchers will employ quantitative and qualitative analyses to describe the results of resource allocation practices in the states. Researchers will explore the relationship between resource allocation and student achievement and the practices and challenges associated with effective spending. They will triangulate the data from all forms of analysis to provide a cumulative depiction of resource allocation in the region. The multiple data sources and analysis techniques will enable researchers to focus on resource allocation processes such as how fiscal needs and/or practices changed or stayed the same, why achievement progressed in the face of challenging conditions, and what consequences resulted from particular patterns or decisions.

Researchers will address the first research question about expenditure patterns by analyzing state fiscal and demographic data. They will use descriptive statistics, i.e., means, percentages, ranges; trends over time; and group comparison statistics. Researchers will compute means for expenditure functions and objects and use t-tests of means and other inferential statistics to analyze differences. Researchers will search for patterns of expenditures to gather evidence about responses to state policy, particularly regarding resource adequacy. The research team will further measure the statistical contribution to expenditures by variables such as district size, property wealth, tax rate, and percent of students living in poverty and use multivariate analysis to control for differences in these and other variables.

Researchers will use quantitative and qualitative analysis techniques to describe district resource allocation practices in improvement school districts relevant to answering the second research question. Qualitative data from individual interviews, focus group sessions and related researcher field notes, open-ended survey questions, and document reviews will be reviewed, categorized, and analyzed using qualitative methods, as recommended by Miles and Huberman

(1994). With the aid of qualitative software, researchers will organize core ideas from the data into thematic categories. One thematic category will relate to innovative practices to answer research question three. Another category will be practices found effective or directly related to student achievement growth. An additional category will address research question four, the identification of barriers and challenges in allocation practices. Two researchers will code these data to create inter-rater reliability. As researchers collect and compile new data, themes and patterns will undergo further validation and refinement. Quantitative data from close-ended questions on the survey will be coded manually or scanned and analyzed using descriptive statistics such as frequency counts and percentages. Researchers will prepare cross-district comparisons by variables such as site demographics and student performance. The research team will perform cross-state comparisons of the improvement districts, as feasible.

### Validity, Reliability, and Confidentiality Issues

The validity of the instruments used to collect data, the reliability of the results, and the confidentiality of the study participants are always concerns in this type of research. To address validity concerns in the development of the instruments, i.e., the interview protocol, focus group questions, and survey, initial pilot testing will be performed. Additionally, expert internal and external reviewers will provide feedback on the instruments prior to their final implementation in the study.

The pilot testing of the interview instrument will also provide a means for assessing the internal consistency of interviewer methods and techniques. To further strengthen internal consistency in data collection, the research team will participate in internal and external staff development related to interview and focus group discussion procedures. Reliability of the

results will be addressed by using internal review of the data by at least two researchers, triangulation of data, and external reviews.

Confidentiality will be maintained for all participants. Name identification of specific school districts, schools, or individual participants will not be disclosed in the study. The research team will follow appropriate procedures for assuring that potential study participants (interview subjects, focus group members, and survey respondents) have adequate information about the study and adequate assurances about how confidential records are maintained to make informed decisions whether or not to participate.

### Research Plan Task Timeline

Activity	Time
<b>Collect Background Information for Research</b>	
Search web site for each state agency	Feb 01
Establish state level contacts	Mar – April 01
Discussions with Task 1 intensive site staff	Feb 01/ongoing
Examine existing data systems	Feb 01/ongoing
<b>Develop Research Design</b>	
Review the literature	Feb 01/ongoing
Draft research questions	Mar 01
Develop methodology	Mar 01 – June 01
Develop instruments (survey, interview protocols, focus group questions, form for quantitative data, as needed)	Mar 01 – June 01
<b>Determine and select sample</b>	Mar 01 – June 01
Select/identify states (up to 5)	
Select sites (districts/schools)	
Obtain verbal and written permission from states and sites for data collection	
Develop written design	Mar 01 – June 01
<b>Collect Research Data</b>	
Collect state data on finance and performance	Apr 01 – Oct. 01
Collect interview and focus group data on-site	July 01 – Dec 01
Collect survey data	Sept 01 – Dec 01
<b>Perform Analysis of Research Data</b>	
Identify appropriate analyses to answer research questions	Mar 01– June 01
Conduct analyses	Nov 01- May 02
<b>Write-up Research Report</b>	
Develop final report	By Nov 02
Distribute report to target audience	Dec 02

## References

- Adams, J.E., Jr. (1997). Organizational context and district resource allocation: Does the setting matter? *Journal of Education Finance*, 23, 234-258.
- Ballou, D. (1998). The condition of urban school finance: Efficient resource allocation in urban schools. In W.J. Fowler, Jr. (Ed.), *Selected papers in school finance, 1996* (pp. 61-84). Washington, D.C.: National Center for Education Statistics.
- Chambers, J.G. (1995). Public school teacher cost differences across the United States: Introduction to a teacher cost index (TCI). In W.J. Fowler, Jr. (Ed.), *Developments in School finance, 1995* (pp. 21-32). Washington, DC: National Center for Education Statistics.
- Chambers, J.G. & Parrish, T. (1994). State-level education finance. In *Advances in educational productivity* (pp. 45-74). Greenwich, CT: JAI Press.
- Coleman, J.S., Campbell, E.Q., Hobson, C. J., McPartland, J., Mood, A.M., Weinfeld, F. D., & York, R.L. (1996). *Equality of educational opportunity*. Washington, DC: U.S. Government Printing Office.
- Duck, J. D. (2001). *The Change Monster*. New York: Crown Business.
- Ferguson, R.F. (1991). Paying for public education: New evidence on how and why money matters. *Harvard Journal on Legislation*, 28, 465-497.
- Goertz, M.E. & Duffy, M.C. (1999). Resource allocation in reforming schools and school districts. In M.E. Goertz and A. Odden (Eds.), *School-based financing* (pp. 215-244). Thousand Oaks, CA: Corwin.
- Greenwald, R., Hedges, L.V., & Laine, R.D. (1996). The effect of school resources on student achievement. *Review of Educational Research*, 66, 361-396.
- Grissmer, D., Flanagan, A., & Williamson, S. (1998). Does money matter for minority and disadvantaged students? Assessing the new empirical evidence. In W.J. Fowler, Jr. (Ed.), *Developments in school finance, 1997* (pp. 15-30). Washington, DC: National Center for Education Statistics.
- Hall, G.E. & Hord, S. M. (2001). *Implementing change: Patterns, principles, and potholes*. Boston, MA: Allyn and Bacon.
- Hanushek, E.A. (1986). The economics of schooling: Production and efficiency in public schools. *Journal of Economic Literature*, 24, 1141-1177.
- Hanushek, E.A. (1997). Assessing the effects of school resources on student performance: An update. *Educational Evaluation and Policy Analysis*, 19(2), 141-164.

Hanushek, E.A. (1994). *Making schools work: Improving performance and controlling costs*. Washington, D.C.: The Brookings Institution.

Hartman, W.T. (1988). District spending: What do the dollars buy? *Journal of Education Finance*, 13, 436-459.

Hedges, L.V., Laine, R.D., & Greenwald, R. (1994). Does money matter? A meta-analysis of studies of the effects of differential school inputs on student outcomes. *Educational Researcher*, 23(3), 5-14.

Hord, S. (1990). *Realizing school improvement through understanding the change process*. Austin, TX: Southwest Educational Development Laboratory.

Hussar, W. & Sonnenberg, W. (2000). *Trends in disparities in school district level expenditures per pupil*. Washington, DC: National Center for Education Statistics.

Krueger, A.B. (1998). Reassessing the view that American schools are broken. *Federal Reserve Bank of New York Economic Policy Review*, 4(1), 29-43.

Levin, H.M. (1988). Cost-effectiveness and educational policy. *Educational Evaluation and Policy Analysis*, 10, 51-69.

Levin, H.M. & McEwan, P.J. (2001). *Cost-effectiveness analysis, 2<sup>nd</sup> Edition*. Thousand Oaks, CA: Sage.

Merriam, S.B. (1988). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.

Miles, K.H. & Darling-Hammond, L. (1998). Rethinking the allocation of teaching resources: Some lessons from high-performing schools. *Educational Evaluation and Policy Analysis*, 20, 9-29.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Monk, D.H. & Hussain, S. (2000). Structural influences on the internal allocation of school district resources: Evidence from New York state. *Educational Evaluation and Policy Analysis*, 22, 1-26.

Monk, D.H. & Rice, J.K. (1999). Modern education productivity research: Emerging implications for the financing of education. In W.J. Fowler, Jr. (Ed.), *Selected papers in school finance, 1997-99* (pp. 111-139). Washington, DC: National Center for Education Statistics.

Murnane, R.J. & Levy, F. (1996). *Teaching the new basic skills*. New York, NY: The Free Press.

Odden, A.R. & Archibald, S. (2001). *Reallocating resources: How to boost student achievement without asking for more*. Thousand Oaks, CA: Corwin.

Odden, A.R. & Busch, C. (1998). *Financing schools for high performance: Strategies for improving the use of educational resources*. San Francisco: Jossey-Bass.

Odden, A.R. & Picus, L.O. (2000). *School finance: A policy perspective*. Boston, MA: McGraw Hill.

Parrish, T.B. & Hikido, C.S. (1998). *Inequalities in public school district revenues*. Washington, DC: National Center for Education Statistics.

Picus, L.O. (2001). *In search of more productive schools: A guide to resource allocation in education*. Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon.

Picus, L.O. & Fazal, M.B. (1995). The \$300 billion question: How do public elementary and secondary schools spend their money? In W.J. Fowler, Jr. (Ed.). *Developments in school finance* (pp. 79-96). Washington, DC: National Center for Education Statistics.

Reschovsky, A. & Imazeki, J. (1998). The development of school finance formulas to guarantee the provision of adequate education to low-income students. In W.J. Fowler, Jr. (Ed.). *Developments in school finance 1997* (pp.121-148). Washington, DC: National Center for Education Statistics.

Rice, J.K. (1997). Cost analysis in education: Paradox and possibility. *Educational Evaluation and Policy Analysis*, 19(4), 309-317.

Southwest Educational Development Laboratory. (SEDL, 2000a). *Creating knowledge to build high-performing learning communities: A proposal to serve as the Regional Educational Laboratory for the Southwestern Region*. Austin, TX: Author.

Southwest Educational Development Laboratory. (SEDL, 2000b). *Resource allocation practices and student achievement: An examination of district expenditures by performance level with interviews from twenty-one school districts*. Austin, TX: Author.

Stiefel, L., Berne, R., Iatarola, P., & Fruchter, N. (2000). High school size: Effects on budgets and performance in New York City. *Educational Evaluation and Policy Analysis*, 22, 27-39.

Tsang, M.C. (1997). Cost analysis for improved educational policymaking and evaluation. *Educational Evaluation and Policy Analysis*, 19, 318-324.

U.S. Department of Education, National Center for Education Statistics. (NCES, 2000). *Projections of Education Statistics to 2010*. Washington, DC: NCES, p. 118, Table 43. <http://nces.ed.gov/pubs2000/projections/>.

U. S. Government Accounting Office. (1997). *School finance: State efforts to reduce funding gaps between poor and wealthy districts*. Washington, DC: U.S. Government Accounting Office.

## Appendix A

### Data Sources Matrix

Research Questions	Data Sources	Methodologies
<p>1. What are the expenditure patterns over time in school districts across varying levels of student performance?</p>	<ul style="list-style-type: none"> <li>• State revenue and expenditure reports</li> <li>• District budgets and financial reports</li> <li>• Common Core of Data (CCD)                             <ul style="list-style-type: none"> <li>- Revenue sources</li> <li>- Total expenditures</li> <li>- Expenditures by function total and by student</li> <li>- Expenditures by object total and by student</li> </ul> </li> <li>• State CCD submissions for 1998/99 and 1999/00</li> <li>• State demographic data for school districts and schools</li> <li>• Program expenditures</li> <li>• Interviews of state fiscal experts</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare multi-year description of state revenues and expenditures for public education</li> <li>• Compute descriptive statistics for CCD revenue and expenditure data</li> <li>• Compare multi-year expenditure allocations across functions and objects</li> <li>• Analyze allocation patterns over time to discern responses to state policies</li> </ul>
<p>2. How do improvement school districts allocate their financial resources?</p>	<ul style="list-style-type: none"> <li>• State laws, reports, and other documents identifying state policies that affect resource allocation</li> <li>• District-adopted budgets                             <ul style="list-style-type: none"> <li>- Revenue</li> <li>- Total expenditures</li> <li>- Expenditures per student</li> <li>- Expenditures per school</li> <li>- Expenditures per program</li> </ul> </li> <li>• Web-based materials from states and districts describing district and school expenditures and policies</li> <li>• State accountability reports or ratings for districts and schools</li> <li>• Interviews of district and school administrators</li> <li>• Focus groups of school administrators</li> </ul>	<ul style="list-style-type: none"> <li>• Document analysis for state and local policies that impact district and school resource allocation decisions</li> <li>• Description of funding structure and resource allocation decision-making process at the district and school levels                             <ul style="list-style-type: none"> <li>- Allocation process</li> <li>- Roles and responsibilities</li> <li>- Allowance of school discretion</li> <li>- Changes over time</li> <li>- Influential factors</li> <li>- Use of data</li> <li>- Use of evaluation</li> </ul> </li> </ul>

Continued on next page

Data Sources Matrix continued

Research Questions	Data Sources	Methodologies
<p>3. What allocation practices have improvement school districts implemented that they identify as innovative and effective?</p>	<ul style="list-style-type: none"> <li>• Interviews with district and school administrators</li> <li>• Focus groups with school administrators at improvement districts</li> <li>• Surveys of instructional staff at improvement districts</li> </ul>	<ul style="list-style-type: none"> <li>• District allocation of resource during the period of improvement</li> <li>• Description of changes and innovations at the district and school levels                             <ul style="list-style-type: none"> <li>- Determination of level of effects</li> <li>- Evaluation</li> <li>- Sources of funds</li> </ul> </li> </ul>
<p>4. What barriers and challenges have improvement school districts faced in allocation practices?</p>	<ul style="list-style-type: none"> <li>• State laws, reports, and other documents identifying state policies that affect resource allocation</li> <li>• Interviews with district and school administrators</li> <li>• Focus groups with school administrators at improvement districts</li> <li>• Surveys of instructional staff at improvement districts</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of state laws and documents to identify policies or standard-operating-procedures that support or impede resource reallocation</li> <li>• Description of barriers and challenges faced in allocation practices at the district and school levels</li> <li>• Identification of strategies to overcome barriers and challenges at the district and school levels</li> </ul>

## Appendix B

### Instruments

Interviewer Guidelines	page B-2
Improvement District Interview Protocol: District Administrators	page B-3
Improvement District Interview Protocol: School Administrators	page B-6
Focus Group Guide	page B-9
Information Letter for Survey Respondents	page B-10
Improvement District Survey	page B-11

## **Interviewer Guidelines**

In preparation for site visits, collect background materials available regarding the district/school finance structure, recent school improvement efforts, teacher compensation schedules or policies, etc. Also review any data compiled and analyzed that will help provide insights on accountability status, teacher tenure/turnover, allocation patterns, student performance improvement history, demographics, unique features. Use this information to help inform the interviews. Also, use the information, and responses provided by the interviewee, to frame the interview questions.

Interview prompts are included in bullets under many questions. They should be used to probe for information pertinent to our study that the interviewee may not discuss in their initial response.

Each interview section has a reference code to clarify the purpose of the questions, i.e., for contextual purposes or to specifically answer the research questions. The reference codes are:

C = Contextual information

RQ2 = How do improvement districts allocate their financial resources?

RQ3 = What allocation practices have improvement districts implemented that they identify as innovative and effective?

RQ4 = What barriers and challenges have improvement districts faced in allocation practices?

### **Introduction and consent information to be read aloud or explained before the interview:**

*The Southwest Educational Development Laboratory, a private non-profit organization that works to improve education through research and development, is conducting research on education resource allocation in the Southwestern Region. We are conducting interviews with state, district, and school decisionmakers to gain a better understanding of how education resources are allocated to support student achievement. The purpose of this interview is to find out your district's successful spending practices, the barriers and challenges your district(s) face, and the decision-making process that guides spending.*

*Please review and sign the consent form (Get signature on consent form)*

*Do you have any questions?*

*I would like to record our conversation so that I can refer back to it later for analysis. Is it all right if I record our conversation?*

If “**yes**”, tell the interviewee — *If at any time during this interview you want me to turn off the tape, just let me know. Also tell me if you decide after the interview that you'd like part of our conversation erased from the tape or considered “off-the-record.” If you would like to end the interview at any time, please let me know. **Begin the audiotape.***

If “**no**”, do not begin the audiotape, take notes manually instead. Tell the interviewee — *Please tell me if you would like any part of our conversation considered “off-the-record.” If you would like to end the interview at any time, please let me know.*

## **Improvement District Interview Protocol District Administrator**

### **Lead-In [C]**

**First, I'll ask you a few general questions about you and [insert district name]**

1. Tell me about your role and responsibilities in the district.
  - How long have you been in this position?
  - Have you held other positions in this or any other school district?
2. What is the vision that drives your district's goals and activities?
3. Tell me about the characteristics that best describe [insert district name].
4. What is unique about your district?

### **General Funding and Resource Allocation Decision-Making [RQ2]**

**Next, I'd like to get an understanding of [insert district name]'s general funding structure and resource allocation decision-making.**

5. How is your district budget developed?
  - What is your role in the budgeting process?
6. How has the budget process changed over the past 5 years?
7. Who decides how financial resources are allocated in [insert name of district]?
  - How is consensus reached?
8. What role do schools play in resource allocation decisions made at the district level?
9. How much discretion do schools have over allocation decisions at the school level?
10. How do you decide on the coding of expenditures?
11. What internal control methods do you use to ensure expenditures are coded correctly?
12. What factors most influence how your district allocates resources?
  - District characteristics (demographics, enrollments, district wealth, region, size)
  - District staffing (teacher pool, administrative structure, compensation)
  - Goals and priorities (student performance, diversity, parent involvement, social services)
  - Structures (state, federal and district hierarchy and regulations)
  - Special needs of student population, schools, district
  - Availability or lack of funds
  - Other

13. How have these factors changed in the last five years?
14. How does your district use data to make decisions about how to allocate resources?
  - What type of data, i.e., from school, district, state, federal?
15. How do you evaluate the effectiveness of district spending patterns?
  - How are instructional programs and supportive services evaluated?
  - How is student performance considered in evaluating fiscal effectiveness?
16. What happens if a spending practice is determined to be ineffective?
17. How would you change your district's allocation patterns?

### Student Performance and Resource Allocation [RQ3, RQ4]

**According to state data, your district has sustained continuous improvement in student achievement over the last 4 years. We are interested in learning about these improvements and their relationship to your district's allocation of fiscal and non-fiscal resources.**

18. Describe the student performance improvements your district has made in the past five years.
  - In which areas have you seen the performance gains (overall achievement, achievement in specific subject areas, attendance, drop-outs, etc.)?
  - Do your improvement goals include student success indicators other than academic achievement?
  - Have certain student populations improved more than others?
  - Is your focus on the improvements of a specific population of students?
  - Do you monitor data or other evidence of improved student performance?
19. In what ways has the allocation of fiscal and non-fiscal resources impacted improvements in student performance in your district?
  - Changes in spending patterns?
  - Staffing changes or innovations (teacher quality, class size, teacher supply, administrator supply, staff training/professional development, etc.)?
  - Instructional changes or innovations (regular and special programs, curriculum, teaching practices)?
  - Other

**\*\*Note to interviewer: For each of the resources in response to Q19, ask questions 20-23.**

20. Tell me more about [insert resource/program/practice from Q19].
  - Detailed description
  - Level of effect (classroom, school, district-wide, special populations, etc)
  - Academic area (reading, math, bilingual, etc.)

*Allocation Study of Educational Resources in the Southwestern Region*

21. How was [insert resource/program/practice from Q19] funded?
  - New money or existing funds that were reallocated?
22. How do you evaluate the effectiveness of [insert resource/program/practice from Q19]?
  - Is student performance considered?
  - How long did you give [insert resource/program/practice] to demonstrate success?
23. Have you expanded or modified [insert resource/program/practice] based on evaluation results?
24. In [insert district name], are there sources of funds outside of the school budget that are used for resources [such as those from Q19] to improve student performance?
25. What allocation practices in your district would you consider innovative and effective in improving student performance?
26. In [name of district]'s efforts to support student performance improvements, what barriers and challenges has the district faced in its resource allocation practices?
  - fiscal barriers and challenges?
  - staffing challenges?
  - instructional challenges (programs, curriculum, teaching practices, etc.)?
  - Other

**\*\*Note to interviewer: For each of the barriers/challenges in response to Q26, ask questions 27-28.**

27. Tell me more about [insert barrier/challenge].
  - Detailed description
  - Level of effect (classroom, school, district-wide, special populations, etc.)
28. How have you worked (are you working) to overcome the barrier/challenge?

**General Closing**

29. Before we end the interview, what other information do you think might be important for us to know about resource allocation and improved student achievement in your district?
  - What advice would you give regarding resource allocation to another district that is working to make improvements in student performance?

Interviewee Name \_\_\_\_\_ Title \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Interviewer Name \_\_\_\_\_ Date of Interview \_\_\_\_\_

## **Improvement District Interview Protocol**

### **School Administrators**

Lead-In [C]

**First, I'll ask you a few general questions about you and [insert school name]**

1. Tell me about your role and responsibilities in [insert school name].
  - How long have you been in this position?
  - Have you held other positions in this or any other school?
2. What is the vision that drives your school' goals and activities?
3. Tell me about the characteristics that best describe [insert school name]?
4. What is unique about your school?

**General Funding and Resource Allocation Decision-Making [RQ2]**

**Next, I'd like to get an understanding of the general funding structure and resource allocation decision-making at your school and in your district.**

5. How is the budget developed for your district?
6. How has the budget process changed over the past 5 years?
7. What role does your school play in resource allocation decisions made at the district level?
8. Who decides how financial resources are allocated for your school?
9. How much discretion does your school have over allocation decisions for your school?
10. How do you decide on the coding of expenditures?
11. What internal control methods do you use to ensure expenditures are coded correctly?
12. What factors most influence how your school allocates resources?
  - District characteristics (demographics, enrollments, district wealth, region, size)
  - District staffing (teacher pool, administrative structure, compensation)
  - Goals and priorities (student performance, diversity, parent involvement, social services)
  - Structures (state, federal and district hierarchy and regulations)
  - Special needs of student population, schools, district
  - Availability or lack of funds
  - Other

13. How have these factors changed in the last five years?
14. How does your school use data to make decisions about how to allocate resources?
  - What type of data, i.e., from school, district, state, federal?
15. How do you evaluate the effectiveness of school spending patterns?
  - How are instructional programs and supportive services evaluated?
  - How is student performance considered in evaluating fiscal effectiveness?
16. What happens if a spending practice is determined to be ineffective?
17. How would you change your school's allocation patterns?

### Student Performance and Resource Allocation [RQ3, RQ4]

**According to state data, your school has sustained continuous improvement in student achievement over the last four years. We are interested in learning about these improvements and their relationship to the allocation of fiscal and non-fiscal resources.**

18. Describe the student performance improvements your school has made in the past five years.
  - In which areas have you seen the performance gains (overall achievement, achievement in specific subject areas, attendance, drop-outs, etc.)?
  - Do your improvement goals include student success indicators other than academic achievement?
  - Have certain student populations improved more than others?
  - Is your focus on the improvements of a specific population of students?
  - Do you monitor data or other evidence of improved student performance?
19. In what ways has the allocation of fiscal and non-fiscal resources impacted improvements in student performance in your school?
  - Changes in spending patterns?
  - Staffing changes or innovations (teacher quality, class size, teacher supply, administrator supply, staff training/professional development, etc.)?
  - Instructional changes or innovations (regular and special programs, curriculum, teaching practices)?
  - Other

**\*\*Note to interviewer: For each of the resources mentioned in response to Q19, ask questions 20-23.**

20. Tell me more about [insert resource/program/practice from Q19].
  - Detailed description
  - Level of effect (classroom, school, district-wide, special populations, etc)
  - Academic area (reading, math, bilingual, etc.)

*Allocation Study of Educational Resources in the Southwestern Region*

21. How was [insert resource/program/practice from Q19] funded?
  - New money or existing funds that were reallocated?
22. How do you evaluate the effectiveness of [insert resource/program/practice from Q19]?
  - Is student performance considered?
  - How long did you give [insert resource/program/practice] to demonstrate success?
23. Have you expanded or modified [insert resource/program/practice] based on evaluation results?
24. Are there sources of funds outside of the school budget that your school uses for resources [such as those from Q19] to improve student performance?
25. What allocation practices would you consider innovative and effective in improving student performance at your school?
26. In [name of school]'s efforts to support student performance improvements, what barriers and challenges have you faced in your resource allocation practices?
  - fiscal barriers and challenges?
  - staffing challenges?
  - instructional challenges (programs, curriculum, teaching practices, etc.)?
  - Other

**\*\*Note to interviewer: For each of the barriers/challenges in response to Q26, ask questions 27-28.**

27. Tell me more about [insert barrier/challenge].
  - Detailed description
  - Level of effect (classroom, school, district-wide, special populations, etc)
28. How have you worked (are you working) to overcome the barrier/challenge?

**General Closing**

29. Before we end the interview, what other information do you think might be important for us to know about resource allocation and improved student achievement in your school or district?
  - What advice would you give regarding resource allocation to another school that is working to make improvements in student performance?

Interviewee Name \_\_\_\_\_ Title \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Interviewer Name \_\_\_\_\_ Date of Interview \_\_\_\_\_

## **Focus Group Guide**

Questions:

1. Describe the unique characteristics of your district.
2. Tell me about the changes your school and district have made over the past five years to improve student achievement?
3. What types of allocation practices have impacted student performance in your school and district?
4. What resource allocation barriers or challenges has your school/district faced in improving student performance?
5. Describe the district/school relationship in the allocation of resources at [insert district name]?
6. What advice would you offer about effective resource allocation practices to other educators to improve student performance?

(use SEDL letterhead)

Date, 2001

Survey Recipient Name  
Survey Recipient Address  
City, State, Zip

Dear Survey Recipient:

The Southwest Educational Development Laboratory (SEDL) is contacting teachers and other instructional staff at selected schools throughout the Southwestern Region to find out about the ways that the allocation of resources affects student performance.

Enclosed is a survey that will help us learn about your views regarding your school and district resource allocation practices, including funding, personnel, programs, facilities, and other areas. We are very much interested in innovative allocation practices and barriers and challenges to resource allocation that may impact student success. The survey information we obtain from you will be confidential and will only be used by the researchers for this study.

Your views and insights are important to us and will greatly assist our efforts to support effective allocation practices for high student performance in the Southwestern Region. Please feel free to make additional comments to any of the survey questions on the back of the form or attach an additional sheet. Please use the enclosed, self-addressed stamped envelope and return your completed survey by (insert date).

If you need additional information, please contact Dr. Zena Rudo or Ms. Diane Pan at SEDL, 211 East Seventh Street, Austin, Texas 78701, phone: 1-800-476-6861. You may also contact us if you would like to receive a summary of the research findings.

Thank you for your time.

Sincerely,

Dr. Zena H. Rudo  
Program Associate

Ms. Diane Pan  
Program Specialist

## Improvement District Survey

Your anonymous responses to this survey will help us learn about your school and district resource allocation practices. Your participation in this study is voluntary. Your completing this survey will be taken as evidence of your consent to have the information used for the purposes of this study. Feel free to make additional comments on the back of the survey form. Please return your completed survey in the enclosed self-addressed, stamped envelope to SEDL no later than (insert date).

**PLEASE BE SURE TO COMPLETELY DARKEN EACH BUBBLE THAT YOU MARK.**

1. Which of the following best describes your relationship to your public school?
  - Teacher
  - Teacher's aide
  - Curriculum specialist
  - Other (Specify: \_\_\_\_\_)
  
2. How long have you held this position?
  - First year
  - Two to four years
  - Five to ten years
  - More than ten years
  
3. Which of the following characteristics best describe your school district? (*Please bubble-in all that apply*)
  - Rural
  - High percentage of minority students
  - Urban
  - High percentage of students with limited English language
  - Suburban
  - High district wealth
  - High poverty student population
  - High student mobility
  - Other \_\_\_\_\_
  
4. Which of the following factors influence how your district allocates resources to schools? Use a scale from 1 (to a great extent) to 4 (not at all).

	To a great extent	To some extent	Very little	Not at all
a. School characteristics	φ	κ	λ	μ
b. School type	φ	κ	λ	μ
c. Student needs	φ	κ	λ	μ
d. Staffing needs	φ	κ	λ	μ
e. Laws and regulations	φ	κ	λ	μ
f. District goals and priorities	φ	κ	λ	μ
g. Fairness and equity	φ	κ	λ	μ
h. Availability or lack of funds	φ	κ	λ	μ
i. Other, please specify: _____	φ	κ	λ	μ

5. Who most influences how financial resources are allocated in your district? *(Please bubble-in one choice)*
- State policymakers
  - District superintendent
  - District chief financial officer
  - Other district staff
  - School board members
  - School principal
  - Other school staff
  - Other: \_\_\_\_\_
  - Unsure
6. How do instructional staff at your school participate in district resource allocation decision-making? *(Please bubble-in all that apply)*
- Instructional staff do not participate in resource allocation decision-making
  - Instructional staff participate on a school-based team that influences district resource allocation decisions
  - Instructional staff influence the school principal on resource decisions
  - Instructional staff provide input to district office staff on resource decisions
  - Instructional staff participate in public meetings about education funding matters
  - Instructional staff contact elected representatives about education funding matters
  - Other: \_\_\_\_\_
7. Read the following statements and darken one bubble next to each one to show whether you agree or disagree with it. Use a scale from 1 (agree strongly) to 4 (disagree strongly).

Practices	Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly
<b>District</b>				
a. District resource allocation decisions are aligned with the needs of my school.	φ	κ	λ	μ
b. My district often engages in or attempts innovative practices to improve student performance.	φ	κ	λ	μ
c. My district finds new ways to allocate existing resources to improve student performance.	φ	κ	λ	μ
d. My district evaluates spending practices to make better spending decisions.	φ	κ	λ	μ
<b>School</b>				
e. Instructional staff at my school often engage in or attempt innovative practices to improve student performance.	φ	κ	λ	μ
f. In the past five years new funds for resources have been available to my school to improve student performance.	φ	κ	λ	μ
g. My school finds new ways to allocate existing resources to improve student performance.	φ	κ	λ	μ
h. Instructional staff at my school use data to determine resource needs that will improve student performance.	φ	κ	λ	μ
If instructional staff use data, please indicate the source of data:				

*Improvement District Survey*

8. How much improvement in student performance has your school made in the last five years?
- Much improvement for all students
  - Much improvement for some students
  - Some improvement for all students
  - Some improvement for some students
  - No improvement
  - Unsure

9. Please review the resource strategies below. Under the column labeled “School”, place a check next to the strategies your school has implemented over the past five years that helped improve student performance. If the strategy has also been implemented district-wide, place a check under the column labeled “District.” ***(Please check all that apply)***

	<u>School</u>	<u>District</u>	
a.	_____	_____	Reduced class sizes
b.	_____	_____	Reduced class loads
c.	_____	_____	Increased access to computer technology
d.	_____	_____	Increased planning time for teachers
e.	_____	_____	Improved programs and services for at-risk students (special ed., ELL, dropout, etc.)
f.	_____	_____	Increased special instructional programs (such as reading, mentoring/tutoring, English language)
g.	_____	_____	Increased the number of teachers with more experience or higher degrees
h.	_____	_____	Increased use of classroom aides
i.	_____	_____	Provided needed school materials or equipment
j.	_____	_____	Provided more professional development for teachers
k.	_____	_____	Improved building facilities or maintenance
l.	_____	_____	Other: _____
m.	_____	_____	Unsure

10. Please describe in greater detail at least one of the strategies you checked in question #9 above.

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