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National Conference of State Legislatures

Study of Three States that Utilize School-Level Finance Data

May 1999

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Acknowledgments

This report represents a joint effort in terms of its research, production, and writing. Thanks to many of my colleagues who assisted in various ways. Specifically, thanks go to Julie Bell, Education Program Director at NCSL who read early drafts of the report and offered insightful comments and suggestions. Thanks also go to other NCSL colleagues including: Eric Hirsch who made helpful suggestions on the multi-state survey, Erica Mancha who prepared the appendices, Veronica White who offered assistance with the formatting of the report and Shelby Samuelsen who conducted research and made countless edits to the report.

As primary author I relied on the assistance of several people in other states because they each possess a level of expertise that was needed to gain insights on the respective school-level data systems in Florida, Ohio and Texas. This study could not have been done without their collective efforts. Accordingly, my thanks to Yasser Nakib and Carolyn Herrington who prepared the Florida portion of the report, Catherine Clark who oversaw the preparation of the Texas portion and Matt Cohen who assisted me with the preparation of the Ohio portion of the report.

Linda Bevard served as a technical writer/advisor on the final draft and her assistance is appreciated.

Finally, special thanks go to Pete Bylsma, staff to the Joint Legislative Audit and Review Committee, for his assistance with the survey design, development of survey questions and comments on early drafts of the study.

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I. Introduction

This study was conducted under contract to the Joint Legislative Audit and Review Committee (JLARC) of the Washington State Legislature. The report's primary focus is on three states: Florida, Ohio and Texas and the manner in which those states utilize school-level finance data.

The report's first objective is to present findings from a 50-state survey that NCSL designed and distributed to school finance officers in respective state departments of education. The second objective is to provide an in-depth analysis of how Florida, Ohio and Texas collect and use school-level data. The third objective is to review and report on efforts to promote efficiency and effectiveness of resource allocation in Florida, Ohio and Texas. This report also details school-level data initiatives at the federal level, and poses a series of policy questions and issues to consider for policymakers considering school-level data systems. The appendix also includes a literature review that traces what has become a growing state interest; the collection and use of school-level data.

The analysis of school-level finance data has enormous potential to answer important questions about the distribution of expenditures and resources in school districts and schools.[1] Although several states have indicated interest in examining and using finance data directly from individual schools, very few have the technological requirements to make use of this information in an expansive way.

Florida, Ohio and Texas are considered leaders in this field and represent states that have utilized school-level data for many years. It is our hope that the information contained in this report will assist the state of Washington in considering the potential use and cost of a school-level data system. Following a discussion of the survey results, we present a brief summary of the school-level data systems in Florida, Ohio and Texas.

II. Survey on State Use of School-Level Data

The survey was designed by NCSL under the guidance of JLARC staff. NCSL sent surveys to all fifty states. Surveys were directed to the school finance specialist in the department of education with the goal of reaching those individuals most knowledgeable about the state's school funding system and its components. A follow up fax and phone call was made to those states that had not initially responded to our request. The response rate was 84%, or 42 states. Eight states did not return surveys: Arizona, California, Florida, Hawaii, Indiana, Maine, Massachusetts, and Michigan. However, information was obtained from Florida through other means. This brought the total number of states which provided information to 43.

The survey attempted to gain a knowledge base about the type of data collected and the purposes for which it is used. Table 1 give a quick picture of how the responding states make use of school-level data. The table breaks down responses by four major functions of school-level data collections: pupil, spending, personnel, and performance data. It also provides the specific reason given for the state's interest in this information. The survey results in table 1 indicate that of the 43 states that provided information, all 43 use school level data to report pupil counts. This figure differs, though not dramatically from a previous report prepared by the Council of

[1] Lauri Peternick, Joel Sherman and John Guarnera, "Ohio: A Case Study in School Level Data Collection," *Journal of Education Finance,* vol.24 no. 3 (1999): 303.

Chief State School Officers.[2] The Chief's report identified 36 states that reported pupil counts through school-level data means. We speculate that the discrepancy might be explained simply by the timing of when the surveys were completed.

Table 1. State Collection and Use of School-Level Data

	Types of Data Collected				
State	**Pupils**	**Spending**	**Personnel**	**Performance**	**Reason for collecting data**
Alabama	X	X	X	X	Policy and reporting
Alaska	X		X	X	Federal and state programs
Arkansas	X	In the future	X	X	Report cards and program evaluation
Colorado	X		X	X	Policy and reporting
Connecticut	X		X	X	School profiles and policy
Delaware	X	In FY 2000	X	X	Accountability reporting
Florida	X	X	X	X	
Georgia	X		X	X	Policy and reporting
Idaho	X				Reporting
Illinois	X		X	X	Reporting
Iowa	X		X		Accountability
Kansas	X		X	X	
Kentucky	X		X		Policy and accountability
Louisiana	X		X	X	Accountability and policy analysis
Maryland	X		X	X	Accountability and reporting
Minnesota	X	X	X	X	Accountability and reporting
Mississippi	X	Some	X	X	Reporting
Missouri	X		X	X	Reporting
Montana	X		X	X	Reporting
Nebraska	X		X	X	Policy analysis
Nevada	X	X	X	X	Accountability
New Jersey	X		X	X	School comparisons and aid calculations
New Hampshire	X		X		Policy and reporting
New Mexico	X		X	X	Research and reporting
New York	X		X	X	Policy analysis, accountability
North Carolina	X	In July 1999	X	X	
North Dakota	X		X		Reporting and accreditation
Ohio	X	X	X	X	
Oklahoma	X			X	Reporting
Oregon	X	**	X	X	Reporting
Pennsylvania	X		X	X	Policy analysis and school profiles
Rhode Island	X		X	X	Policy Analysis
South Carolina	X	X	X	X	Functional analysis and reporting
South Dakota	X		X	X	Reporting
Tennessee	X			X	Reporting
Texas	X	X	X	X	Research and accountability
Utah	X		X	X	Reporting
Vermont	X		X	X	Reporting
Virginia	X			X	Reporting and accreditation
Washington	X		X	X	
West Virginia	X	X	X	X	Reporting and policy analysis
Wisconsin	X		X	X	Programs
Wyoming	X			X	Funding purposes
Total	43	9	38	38	

** Has collected school expenditure data for a limited number of districts and plans to expand collection to all districts.

Note: Eight states did not return surveys: Arizona, California, Florida, Hawaii, Indiana, Maine, Massachusetts, and Michigan. However, information was obtained from Florida through other means.

[2] Council of Chief State School Officers. (1998). State Education Accountability Reports and Indicator Reports: Status of Reports across the States. Washington, DC: Author.

Of the 43 states, only 9 have reporting systems in place to report spending data. In an era in which legislators and the public are increasingly interested in knowing how districts spend their money, this is somewhat surprising. This could affect the legislature's ability to adequately monitor individual school performance. Thirty-seven states report using their data systems to ascertain personnel and performance information that is typically presented as school report card data. According to the 1999 Quality Counts publication, a total of 36 states publish annual report cards as an accountability mechanism to communicate individual school performance to the public.[3]

Looking more broadly at the survey results, the states indicated that they use school-level data in the following general categories: to report accountability and accreditation information; provide policy analysis; report information on state specific programs to the federal government; as a source of public information; and to monitor grant funds.

Results from the NCSL survey indicate that very few states have the capacity to use school-level data to analyze pupil, spending, personnel and performance information, either from school districts or the school site. The usefulness of school-level data does not end with its mere collection. Its utility can only be assessed by the quality, type, and function of the data. For example, Minnesota is one of eight states that collects pupil, spending, personnel and performance data at the school-level; however, the state lacks a single data base that allows the data to be cross-walked. Thus, its utility is questionable because the school-level data collected must be further disaggregated by program for meaningful data analysis.

The Oregon survey indicated that the state is not currently collecting spending data, however, through the state's "database initiative," the state **is** collecting spending data for 16 districts participating in a SLD pilot program. Thus, while there is not spending data currently available for all 198 school districts, there should be in the near future following the conclusion of the pilot program.

III. The Origins of School-Level Data Programs

The seeds for Florida's uniform cost accounting program for all the state's school districts were sown in 1973. This led to the design and implementation of the Florida Information Resource Network (FIRN) and the Florida Automated System for Transferring Educational Records (FASTER) in 1983. This system of data collection came to include five components: student, staff, finance, facilities and programs.[4]

Ohio's Education Management Information System (EMIS) was born with the passage of Senate Bill 140 in 1989. This legislation made it possible for the formation of one consistent, coherent system by requiring the collection of detailed information on students, staff, programs, services and costs. The overall purpose of the EMIS is to provide better accountability for tax dollars, better policy understanding of school programs and accomplishments, and to help improve the local education system.

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[3] "Quality Counts 99," *Education Week* January 11, 1999.

[4] Yasser Nakib and Carolyn Herrington, "Assessing Florida's Experience in Developing and Using School Level Financial Data," report presented to the National Conference of State Legislatures, 1999.

Ohio policymakers envision that EMIS will be able to support and improve education by providing the information on the needs of the school districts through detailed information on student performance and participation.[5] Consequently, Ohio has developed one of the most detailed building-level expenditure reporting systems in the country, according to department of education officials.

The Texas Education Agency (TEA) began developing the Fall Campus Survey Enrollment Report in 1966 to fulfill a federal requirement spun off from desegregation legislation. The first formal collection year was 1968-69. That system grew into what is commonly known today as the Public Education Information Management System (PEIMS). In 1984, with the passage of House Bill 72, the legislature indicated its interest in using student achievement as a basis for gauging accountability. The first PEIMS collection took place in the fall of 1987, with organization, budget, staff demographic, responsibility and payroll data being collected. Later additions to the data collected included actual financial, dropout, and student demographic and special program information.

Included as a basis of comparison, Table 2 denotes the number of school sites in each of the three states. As expected the state of Texas has the most schools, which corresponds with being the state with the largest number of school districts at 1,054. Ohio has 610 school districts followed by Florida with 67. The state of Florida operates a county school district system with counties being coterminous with districts.

Table 2. State Comparative Demographic Data for Florida, Ohio, and Texas

State	Schools	School Districts	Students
Florida	2,379	67	2,176,222
Ohio	3,672	610	1,836,015
Texas	6,247	1054	3,748,167

IV. State Investments in School-level Data Systems

It is difficult to assess Florida's complete cost of implementing the school-level data system since it was developed incrementally and in phases, requiring the input and efforts of staff and other resources at various levels of the administrative hierarchy and in various state agencies. Most of the cost for implementing a standardized cost accounting system was initially borne by the local school districts. When the Florida Information Resource Network (FIRN) was in development between 1980-82, about $200,000 was expended by the legislature. The current average annual FIRN budget is about $6,000,000.

Since 1989, the State of Ohio has invested over $79 million state dollars in the EMIS. An additional $144 million have been provided directly to the Ohio Education Computer Network (OECN) data acquisition sites as a state subsidy. Although state funding for the OECN had remained relatively constant from fiscal years 1989-1994, the General Assembly increased its funding in fiscal year 1995 by 60% to support the network's role in the School Net Initiatives (see Table 3).

[5] Education Management Information System Page. Ohio Department of Education. http://www.oecn.esu.k12.oh.us/www/ssdt/emis/emis_guide.html#preface, October 8,1998.

Table 3. State Funding for Both the EMIS and OECN Since 1989

House Bill	General Assembly	Biennium	EMIS Funding	OECN Funding	Total Investment
111	118th	1989-1991	$7,044,696		
298	119th	1991-1993	$13,500,000	$20,258,040	$27,302,736
152	120th	1993-1995	$18,000,000	$21,323,136	$34,223,124
117	121st	1995-1997	$18,428,411	$38,240,380	$56,668,791
215 & 650	122nd	1997-1999	$22,360,331	$43,926,937	$66,287,268
Total			**$79,333,438**	**$144,471,61**	**$223,805,05**

The Texas Education Agency (TEA), budgeted $11,000,000 for planning and developing the PEIMS system over a four-year period. Following implementation of PEIMS, agency operating documents show a yearly expenditure of about $3,000,000 for maintenance. Most of the money expended after implementation has been allocated to the twenty regional education service centers, which provide technical support for gathering the data from district data bases.

V. How Three States Collect and Use School-Level Data

This section of the report presents detailed information and analysis of the school-level data programs in the three states that are the focus of this report: Florida, Ohio, and Texas.

A. Florida Narrative Report

Florida has maintained detailed and complex data collection and reporting systems for over two decades. In the face of phenomenal growth (over 40% in the 70's) in enrollment and in an attempt to meet changing political, structural and administrative needs, the state embarked on a data systems development effort. The level of sophistication and rigor of the data systems that Florida currently operates is unique among states and is especially evident in the scope of financial data collected at the school level. The existing system went through various developmental phases and required the firm authority of the state government for its implementation.

A group of Florida legislators, including several who had served on local school boards across the state, were instrumental not only establishing the Florida Education Finance Program (FEFP) in 1973 as a distributional formula that guaranteed a high level of inter-district equity but also in requiring the establishment of a uniform accounting program so that the state could account for the monies appropriated. In that year, the state legislature required (in a transitional phase of three years) that the state department of education develop, test, and then implement a uniform cost accounting program that all districts would use to report data to the state.

Specific Answers to Questions -- Florida

When and why did the state decide to maintain the data?

The Florida Education Finance Program (FEFP) is the driving force behind funding public schools in Florida. The FEFP emerged from the political and social context in the state in the

early seventies. Each of the 67 counties constitutes a school district. The FEFP was developed and adopted in 1973 as a method to fund school districts by program, object and function with the intention off achieving equity and tracking the distribution of funds. It requires detailed financial accounting at the program and school level.

The tracking of funds to specific programs, as determined by state statutes, requires a detailed and comprehensive expenditure accounting system. The state legislature uses information provided by this accounting system to appropriate funds to each district every year.

What kinds of data are maintained?

The financial database is part and parcel of an overall set of comprehensive databases that the state eventually developed and currently maintains. This system of data collection now includes five components: students, staff, finance, facilities and programs. Databases on student, staff and finance constitute the bulk of the instructional components of the system.

How long did it take to set up the data system?

As part of the newly implemented school finance program in 1973, the legislature passed a law requiring "each district [to] account for expenditures of all state, local, and federal funds on a school-by-school and a district-aggregate basis." It took officials at the state department of education about three years (until around 1976) to develop the so-called "red book" of cost accounting.

The state of Florida initially relied on having districts report their data through existing computing capabilities in a few local community colleges. Over the next three to four years, three regional processing centers were funded and put in place to collect and feed the data to the state department of education. As enrollment and requirements grew, the state recognized the need for a comprehensive data collection system. Because Florida has large districts that were having difficulties implementing data collection systems on their own and data that was comparable to other districts'data it became obvious that Florida would need a statewide reporting system. The result was the Florida Information Resource Network (FIRN) in 1983. It provided hardware linkages between the state capitol and the state's educational facilities including community colleges and state universities. It was a critical part of the infrastructure for the development of a public school database.

What are the estimated start-up and annual cost of implementing the data system?

Most of the cost of implementing a standardized cost accounting system was initially borne by local school districts, although the cost was relatively lower in the initial year due to rudimentary practices. In its second year of implementation (1974-75), Orange County (a fairly large district) was granted a contract for $25,000 over a period of two years, and Seminole County a contract for approximately $20,000; to work out issues related to computer programming.

The network FIRN was established with initially about $200,000 for its development stage from 1980-82. Between 1986 and 1991, FIRN's budget averaged $8 million. This amount included "impact funds" to help districts cope with the cost of collecting and reporting data to the state system. The current average annual FIRN budget is $6 million.

What is the level of administrative burden placed on schools and districts in order to comply with the data collection and reporting requirements?

An ongoing concern throughout the development process was the burden on school districts of collecting and inputting the data and maintaining the local software infrastructure. Yet considering the extent to which the state provided funding for the development and implementation of the system, it is remarkable to see that it has in fact been cost effective. There have been undoubtedly disproportionately more costs to the districts. It is difficult to assess the scope and the extent of the burden since the system was implemented over a lengthy period of time, roughly 1980 thru 1991.

In most schools the need for either a full-time staff person or a good portion of a regular employee's time is needed to keep track of all the required data, including the financial data that would be fed into the district office. The staffing capacity could drastically vary due to the size and or level of the school.

The types of problems associated with initiating and implementing the data system?

In Florida, as in other states, there is a tradeoff between how much detail a state should collect and the cost-effectiveness or usefulness of such data. The timing for submission of the required cost reports has proven burdensome in some instances. This is primarily because it usually coincides with the start of the school year.

Individuals who have been involved in the development of the comprehensive data system indicated that district and school administrators are generally reluctant to join any effort to collect and report new data, since it adds to their tasks and it may not provide them with information they use. Florida officials interviewed indicated that in developing a new and comprehensive system of data collection, there needs to be clear incentives and sanctions for schools and districts for not developing collateral data systems.

How the data are being used and by whom (obtain sample reports)?

Although it is the state government that requires the collection and dissemination of school-level finance data, remarkably, the data is in fact hardly used, for analysis or policy related research, by any of the state or eve non-state agencies.

This may change in the near future. As part of the ongoing evolution of an accountability reform effort that started in the early 90's, the state is currently intensifying policies designed to provide rewards and sanctions based on student achievement at the school-level. Legislation to define the responsibility of schools in meeting certain standards of student achievement is being introduced. This renewed focus on student achievement at the school-level will likely bring along with it increased scrutiny of school-level finance.

Additionally, districts may use school-level data for simple comparisons or for specific current purposes, but we are unaware of districts that are routinely using school-level data for analytical purposes.

The state department of education's financial management office responds to numerous requests for information from parents, researchers and special interest groups about vocational programs, special education programs and costs. Department officials use the data to compare program funding by function or object, but only for certain schools. Officials were unaware, however, of any comprehensive analysis of the school-level financial data.

What types of resource allocation analyses are conducted using school-level data?

Practically speaking, the only school-level financial data routinely scrutinized at the state level has been for assuring compliance with the state mandate that at least 80% of the state appropriations be expended in the program that generated the full time equivalent (FTE).

B. Ohio Narrative Report

Other states and national researchers have labeled Ohio a forerunner in collecting elementary and secondary education data. The National Center for Education Statistics (NCES) recently selected Ohio as its only site for studying how school districts use education data for decision making. In 1989, the General Assembly required the Ohio Department of Education (ODE) to increase the amount of information available about Ohio schools to state-level policy makers. Vendors hired by the ODE have designed the EMIS as an electronic version of much of the same information (student, staff and financial) that was previously collected on paper forms. The Education Management Information System consists of screen formatted and report-generating information on students, staff, programs, services and costs. The collection of this data is facilitated by the regional data centers, which comprise the Ohio Education Computer Network (OECN). The name of the actual school-level data descriptive system is the Expenditure Flow Model, or EFM.

Data Collection

Through the EMIS, 202 data elements on students, staff, and finances are collected and electronically transmitted to ODE (see Table 4).

Table 4. Snapshot of Ohio EMIS

Type of Data	Number of Data Elements	Examples
Student	59	Data admitted; number of days in attendance, course taken etc.
Staff	49	Certification status; pay rate; courses taught; funding source
Financial	94	Current fund balance, inside mileage, number of certified employees
TOTAL	202	

It is important to note that EMIS does not allow for individual student data to be collected at the state level. By statute, student data must be aggregated before it is submitted to ODE. Because current law prohibits the collection of individual student data at the state level, the data is aggregated at the district level.

Since 1989 over $79 million state dollars have been allocated to the EMIS and an additional $144 million have been provided directly to the OECN as a state subsidy for EMIS and other services, as of June 1998.

School districts start by entering information about students, staff and finances into local databases. Often these local databases are run on the computers located in the regional data acquisition site. Once entered, the data elements required for EMIS reporting are "extracted" from the local database and stored in a separate file.

Staff and financial data are typically entered in the district's central administrative office. Student data are initially entered at the building level: school-building secretaries are responsible for entering the 59 data elements.

Managing the student data is the most burdensome part of the EMIS for school districts. Many of the concerns about the EMIS stem from the process by which the student data must be handled.

Current Climate

Within the last 2 years, policymakers have increased the level of accountability for elementary and secondary education in Ohio. In July and August of 1997, the General Assembly passed two significant pieces of legislation focusing on districts' performance and fiscal accountability, (S.B. 55 and H.B. 412). Ohio's new accountability standards make the Education Management Information System (EMIS) the most important source of information for evaluating public elementary and secondary schools.

It is important to realize, however, that information about Ohio schools has become much more accurate since the creation of the EMIS in 1989. The replacement of hundreds of paper forms with electronic submissions has resulted in more consistency across records within schools and districts.

Specific Answers to Questions--Ohio

When and why did the state decide to maintain the data?

Amended Substitute Senate Bill 140, passed by the 118th Ohio General Assembly in June 1989, became effective August 2, 1990. In March 1991, the State Board of Education, in response to the legislative mandate, adopted the rule for school districts requiring the development and implementation of a statewide Education Management Information System (EMIS). The purpose of this system is to assure better accountability for tax dollars and provide better policy understanding of school district programs and accomplishments.

What kinds of data are maintained?

Student participation and performance data for each grade in each district as a whole and for each grade in each school building in each district that includes:

- The numbers of students receiving each category of instructional service offered by the district, such as regular education instruction, vocational education instruction, specialized instruction programs or enrichment, instruction for gifted students, handicapped students and those receiving remedial instruction.

- The numbers of students receiving support or extracurricular services for each of the support services or extracurricular services offered by the district such as counseling services, health services, and extracurricular sports and fine arts programs.
- Average student grades in each subject in grades nine through twelve.
- Academic achievement levels in grades one through eight.
- Academic achievement levels as assessed by the testing of student proficiency.
- Rates of retention in middle and high school grades.
- Suspension rates.
- Expulsion rates.
- Attendance rates.
- For pupils in grades nine through twelve, the average number of Carnegie units, as calculated in accordance with state board rules.
- Graduation rates, to be calculated in a manner specified by the Department of Education that reflects the rate at which students who were in the ninth grade three years prior to the current year complete school and that is consistent with nationally accepted reporting requirements.
- Personnel and classroom enrollment data for each district
- The total numbers of certified employees and non-certificated employees and the numbers of full-time equivalent certificated employees and non-certificated employees providing each category of instructional service, instructional support service and, administrative support service.
- Cost accounting data for each district as a whole and for each school building in each district.
- Administrative costs for the districts as a whole, for each school building in the district.
- Instructional services costs for each category of instructional service provided directly to students.
- The cost of the administrative support services related to each instructional services category, such as the cost of personnel that develop the curriculum for the instructional services category and the cost of personnel supervising or coordinating the delivery of the instructional services category.
- The cost of the instructional support services, such as services provided by a speech-language pathologist, classroom aide, multimedia aide, or librarian, provided directly to students.
- The cost of services provided directly to students by a non-certificated employee, such as janitorial services, cafeteria services, or services of a sports trainer.

How long did it take to set up the data system?

State Department of Education officials refer to EMIS as “a work in progress.” However, they note that it took 1 year to set-up (1990), and it was nearly three years past the enactment of the legislation before data started being received (1992), and the EMIS system was underway. The period 1992-98, is referred to as a phase of refining the system. Since 1998, the state department of education has been overhauling the system by converting flat files and legacy programs to a relational data base system.

What is the estimated start-up and annual cost of implementing the data system?

The state initially appropriated about $7 million dollars during the early period (1989-1991) of the project. Please refer to Table 3, which provides an annual breakdown of funding provided for EMIS and OECN for years 1989-99.

What is the level of administrative burden placed on schools and districts in order to comply with data collection and reporting requirements?

Officials pointed to three key factors: the attitude of the superintendent in the district, local acceptance and the ease of the architecture or data system to be manipulated by school personnel. At the outset in 1990-91, the burden was high, because there was typically only one electronic connection to a regional center from the central office and none from individual schools.

What are the types of problems associated with initiating and implementing the data system?

Senate Bill 140 mandated the data that was to be collected not the system to be used to collect the data. As a result there was some initial confusion about funding that would be provided to build the system. At the outset less than 100 of a total of 730 local education agencies or LEA's (this number includes 610 school districts, 23 regional centers and 97 vocational education sites) had no electronic connection to the state. Accordingly, this lessened the burden to some degree in terms of the infrastructure that needed to be put in place for EMIS. The state was also perplexed by learning that vocational education had better systems than most schools and districts because of federal requirements and the fact that federal money had been provided to pay for those systems.

How are the data being used, and by whom (obtain sample reports)?

Ohio policymakers (State board of Education members, Legislators, Gubernatorial policy staff) have a keen interest in knowing whether these data can actually tell them something that can be useful for making future decisions. For the first time, the Department has a database specifically designed for policy analytic uses.

What types of resource allocation analyses are conducted using school-level data?

The design includes assuring meaningful comparability of the data as well as standard definitions of terms. In addition to features like consistency and comparability, the data are organized to analyze individual schools as well as entire districts. Financial questions dealing with issues such as "Charter Schools" and "Site based management" can only be meaningfully analyzed at the school site level.

C. Texas Narrative Report

Data collection at the Texas Education Agency (TEA) began in the 1920s when school district superintendents sent in annual reports of school attendance data. In 1966, TEA began developing the Fall Campus Survey Enrollment Report and the first year of formal collection was during the 1968-69 school year. With the passage of House Bill 72 in 1984 the Texas Legislature identified student achievement as the basis for accountability. The legislation led to

TEA establishing an agency wide task force to examine the reporting implications of the new legislation. Subsequently, TEA developed the Public Education Information Management System or PEIMS.

In 1985, a plan for a coordinated data base for accountability based on student performance was developed which the State Board of Education approved in 1986. The first PEIMS collection took place in 1987. The organization, budget, staff demographic, responsibility and payroll data were collected. Later additions to the data collected included actual financial, dropout, and student demographic and special program information. Currently there are 152 data elements in PEIMS for the 1998-99 school year and all reporting requirement for the elements are documented annually in the TEA publication PEIMS Data Standards.

Specific Answers to Questions --Texas

When and why the state decided to maintain the data?

The development of PEIMS reflected a specific intent of the Legislature to base accountability on student achievement. Enabling legislation was passed in 1984(House Bill 72).

What kinds of data are maintained?

There are 152 data elements in PEIMS for the 1998-99 school year. The PEIMS data collection process consists of the separate submissions each school year. The fall submission, due in December, includes organization and campus data, current fiscal year budget data, staffing data and some student data. The mid-year submission, due in February includes organization and campus data in addition to audited financial data for the previous fiscal year. The summer submission, due in June includes organization, campus data and complete student data.

How long did it take to set up the data system?

A task force was appointed in 1984 to examine reporting implications of House Bill 72. In 1985 a plan for a coordinated database for accountability, based on student performance, was developed which the State Board of Education approved in 1986. The first data collection through PEIMS took place in 1987-88.

What is the estimated start-up and annual cost of implementing the data system?

According to historical TEA operating budgets, during the four years of planning and developing PEIMS, the agency budgeted a four-year total of just under $11,000,000 for this purpose. Following implementation of PEIMS, agency operating documents show about $3,000,000 budgeted each year for the maintenance of PEIMS, with much of that being allocated to the 20 regional education service centers (ESC's), which provide technical support for gathering the data from district data bases.

What is the level of administrative burden placed on schools and districts in order to comply with data collection and reporting requirements?

There is no doubt that PEIMS is a significant administrative burden for some school districts and schools. At the school level, attendance reporting may be a major task. For special program reporting, it is necessary to report contact hours rather than classes and days. Schools must gather accurate information about students and their families and must strive to maintain the integrity of student identification numbers.

At the district level, attendance, finance, demographic, staffing, and instructional assignment information must be accurately maintained and reported to the state. The ESC's reduce the level of burden on schools and districts. ESC PEIMS coordinators provide PEIMS training to school districts; assists school districts with collection, data editing and data reporting; assists school districts in correcting problems with PEIMS data; and submits each school district's information to TEA in electronic form.

What are the types of problems associated with initiating and implementing the data system?

Communication with technical support is an ongoing effort. A major problem with the PEIMS system is accessing the data. Core and sample data are available for downloading on the TEA web site, but the files are large and downloading is not easy for every user. Much of the PEIMS data and test score data are included in the Academic Excellence Indicator System, which is available for downloading and searching on the web site. However, the data available on the web site does not comprise all of the data available through PEIMS. Additional data may be requested from the Division of Information Planning at TEA, but because that division, as well as TEA in general is short-staffed, the turn-around time for data and report requests can be six weeks or longer. Outside requests are typically not fulfilled during the biennial legislative session.

For entities who use data for historical or trend analysis, it is important that the data be consistent from year to year. But data definitions do change. This can pose problems in the system as data elements are added or deleted or as definitions change.

How the data are being used, and by whom?

PEIMS data is used in numerous other reports and analyses produced by the agency and other entities. PEIMS core product reports (see exhibit 23) are available on the TEA web site at http://www.tea.state.tx.us/peims/.

Other state agency uses include: general statistical reporting, legislative modeling, analysis of legislation by the Legislative Budget Board in preparing fiscal notes, and state efficiency studies by the Comptroller of Public Accounts. Uses by non-state related entities include: research and evaluation conducted by university researchers, studies conducted by membership organizations such as the Texas Association of School Boards, and research and studies conducted by consulting groups such as the Educational Productivity Council.

Various reports can be obtained via the Internet. A sampling of reports available include:

- The Academic Excellence Indicator System, http://www.tea.state.tx.us/perfreport/aeis
- The Accountability Rating System, http://www.tea.state.tx.us/perfreport/account
- The School Report Card, Snapshot of School district Profiles, http://www.tea.state.tx.us/perfreprot/snapshot.
- For Federal Reporting, http://www.tea.state.tx.us/perfreprot/special.pop

VI. Efforts to Address Efficiency Through School-Level Data

This section of the report responds to objective three--to review how Florida, Ohio and Texas use school-level data to analyze the efficiency and effectiveness of resource allocation. The state of Ohio has undertaken a study on how to measure efficiency at the school level using both production function and data envelopment analysis methodologies. Following the Florida section is a description of Ohio's study and preliminary answers to the questions posed by JLARC for objective three. While studies are currently underway in Ohio as mentioned above; when asked specifically to respond to the five questions that make up Objective 3, officials reported that "we are not there for school-level efficiency analysis. Our efforts are focused at the district level for now." [6] Similarly, the state of Texas has no formal reporting focus on issues of school district efficiency and effectiveness of resource allocation.

Florida

What types of analysis is conducted?

There is little analysis of resource allocation being performed by state agencies or other interest groups in the state. Most of the analysis that is performed for decision-making purposes uses district rather than school-level financial data.

What is the scope of the analyses (e.g., sample vs. universe)?

A variety of offices within the state department of education, the governor's budget office, legislative staff and committees, and other state agencies use district-level financial data primarily for budgeting and accounting purposes. Special interest groups use this data to lobby the state. The scope of analysis involves either the universe or a sample of districts. Since there are only 67 school districts in the state, it is fairly easy to use and compare financial data for all those districts. There are only sporadic instances where a certain agency or group actually analyzes a sample of school data.

[6] Phone interview with Matt Cohen, Director, Office of Policy Research and Analysis, Ohio Department of Education.

What are the types of data used in the analyses (e.g., district, school, student, fiscal, student achievement, demographic?

Student and staff data at the school-level are more often used than school financial data, even when budgeting and finance-related policies are being reviewed and analyzed by either the legislative or executive branches of state government.

Who conducts the analyses and uses the information?

Many reports and analyses that are performed by various agencies that use school-level student and teacher information. For example, the required annual Florida School Indicator Report (see http://www.firn.edu/bin00068/title/htm) primarily provides data by school on student achievement and demographics.

Another annual report produced by the state department provides student performance data for freshmen entering the state's community colleges and universities and reports it back to the high school from which the student graduated. The department also provides annual reports, using the individual teacher records that are available in the staff database, that analyze teacher employment issues in the state. Some of the analysis is used by state officials to track shortages in teachers by area of concentration. One other recent analysis that used school and classroom-level data was a class-size reduction cost study by a team of state policy analysts under the auspices of the state senate.

What are the problems or limitations associated with the analysis?

Some potential users of school-level financial data indicated that part of the difficulty they face is that the complexity of the data makes it challenging for them to understand the meaning or significance of the data components. Understandably, those individuals are not necessarily inclined to conduct and use sophisticated and complex statistical analyses. Their basic use would be for simple comparisons. One respondent to a questionnaire simply said, "the state needs to keep it simple so that lay people can relate to it and be able to mine it with ease."

On the other hand an economist directing a research unit for the legislature indicated that using data elements from Florida's nearly 3200 schools often becomes impractical and it is sometimes difficult to draw meaningful inferences. He indicated that the frequency in reporting errors is much greater in school-level data than it is in district-level data. Also, the cost of retrieving school-level data and analyzing it could easily outweigh the benefits for the types of analysis they conduct for the state government.

In the future, as issues of accountability and school finance undergo more political and public scrutiny, officials anticipate seeing more use of school-level data. Most of the planning, technical, and management decisions regarding the school-level system were made in the 1970s and 1980s. But in the 1990s, increased legislative interest in school efficiency and effectiveness and the creation of the Office of Program and Policy Analysis for Government Accountability (OPPAGA) have increased the use of data for school public policy decision making. OPPAGA's formation addressed the legislature's need to have a legislative program auditing capacity for state level programs. Florida is also engaging in performance based budgeting, which should also encourage the use of school-level data in the future.

Ohio

The state of Ohio is actively pursuing research on efficiency and effectiveness. To that end the state has commissioned a study that is currently under way. The premise of the efficiency study is that "a school is inefficient in comparison to its peers if another school is achieving better results using the same level of expenditures or, alternatively, if another school is achieving the same level of results at a lower level of expenditures." [7] Measurement of environmental conditions is not well established in the state's current data collection system. Thus assuming sufficient data can be provided for the modeling process, validation and application of the model results will require systematic site evaluations at the school level.

Ultimately, if it can be shown that the differences can be explained in terms of actual spending or programmatic differences, the model can be relied upon as a valid indicator of school efficiency.

The study will seek to address the following data needs:

- Measurement of relative efficiency across schools and districts.
- The unresolved factor of how to adequately measure the school and community environment.

Those working on the model must take two primary factors into account regarding environmental conditions:

- Unspecified inputs*:* high levels of parental participation with student homework and reading can be interpreted as a set of educational inputs that enhance student performance at no cost to the school.
- Unspecified costs: high levels of single-parent households create requirements for additional resources from the schools in order to maintain a given level of achievement.

Two modeling efforts are under way. The Department of Education has contracted with Dr. John Reuggiero, an Associate Professor of Economics with the University of Dayton, who has been working on applying efficiency modeling procedures to public sector activities. He is developing a handbook and preliminary model on the potential for accurate efficiency modeling in Ohio. Additionally, Conrath and Trout Associates (CTA), a local education consulting firm specializing in performance analysis, has been working with the Department of Education to develop a set of site evaluation tools that will help distinguish efficient and inefficient practices at the school site.

The study has limitations including these:

- Expenditure data alone cannot explain what the districts are buying with the money. (For example, a district report's that $1,000 was spent on instructional materials but what do those materials consist of?)
- The study cannot explain the differences in educational programs (course, instructional methods, etc.) and how these differences influence efficiency and effectiveness.

[7] Ohio Department of Education. Memorandum on the Operational Efficiency Study Efficiency Modeling, October 8, 1998.

These studies will assist with school improvement efforts as districts strive to meet new state performance standards. Through a systematic evaluation process, districts and schools will be in a better position to develop effective improvement strategies in the short term rather than waiting and facing state intervention in order to begin reorganizing their resources to meet the performance objectives.

What are the types of analyses conducted?

No school-level data is currently analyzed, though the state is moving to this level.

What is the scope of the analyses (e.g., sample vs. universe)?

For efficiency analysis it is impossible to measure absolutely. Efficiency depends on the sample selected.

The types of data used in the analyses (e.g., district, school, student, fiscal; student achievement; demographic?

All of above denoted data are used.

Who conducts the analyses and used the information?

Dr. John Ruggerio Associate Professor, University of Dayton, State Department of Education personnel, State Board of Education, Governor's budget personnel, Researchers, PTA.

What are the problems or limitations associated with the analysis?

There are several. One is the assumption that every district is efficient. The second is that the analysis is only as good as the data provided. The technique has been refined and improved since the beginnings of efficiency research; however, further refinements can be made.

An October 1998 memorandum from the Department of Education's, Office of Policy Research and Analysis, on the operational efficiency of EMIS noted the following concerns:

> "ODE should make EMIS a higher priority. There is a lack of understanding on how EMIS works, lack of cooperation among ODE divisions, and the fact that there is no group of ODE employees with knowledge of educational programs. This trickles down to the district level where there are inadequate processes for collecting and entering data into the system. Additionally, district administrators do not see the value of EMIS to better inform educational practice; therefore, school districts need help in changing their perceptions and mindset about using EMIS."

Texas

As stated at the outset of this section, the state of Texas has no formal mechanisms for conducting efficiency or effectiveness analyses. Policymakers continue to focus attention on student achievement and thus rely substantively on the Texas Assessment of Academic Skills

(TASS), and the Accountability Rating System as the primary mechanisms for assessing the performance of students each year in each school and district in the state of Texas.

Who conducts the analyses and used the information?

Users of school-level data include various divisions of the Texas Education Agency including: the Division of Performance Reporting; the Office of Policy Planning and Research, the Division of State Funding, the Division of Information Systems, and the Data Warehouse project; the Legislative Budget Board's, Public Education Team; the Comptroller of Public Accounts, Property Tax Division; the Texas Bond Review Board's, Office of Local Government Services; the Fast Growth School Coalition; the Educational Productivity Council; Texas Business and Education Coalition; Just for the Kids; Texas Association of School Boards; Texas Association of School Business Officials; and the Texas Elementary Principals and Supervisors Association.

VII. InSite: An Alternative Method for School-Level Data Collection

Yet another option for policymakers interested in examining school-specific financial data is a relatively new finance methodology initially advanced by the Center for Workforce Preparation and Fordham University (New York) professor Bruce Cooper. This led to a 1994 collaboration between the center and the accounting firm, Coopers & Lybrand,. Originally known as the financial analysis model or "FAM," this product consists of a software package that is currently used in 188 school districts in 17 states. Now referred to as InSite, it permits districts to build a relational data base from whatever accounting system it is already using to analyze expenditures and report all costs by school site, central office and a non-allocated category. A key limitation is that this allocation procedure model gives the user expenditure and pupil data but it can't provide performance data. InSite provides the user with an expenditure analysis by function, by location, by program and by individual school and school type. Although InSite does not provide the complete answer to complex policy issues in education, it does generate the information necessary (when used in combination with test scores, attendance data, teacher qualities and the like) to improve the productivity and efficiency of America's schools.[8] Thus, as a methodology for taking school district data and converting it to individual school data, InSite does provide another option to policymakers seeking pupil and expenditure data.

VIII. Federal Efforts to Capture and Use School-Level Data

The National Center for Education Statistics (NCES) has an extensive national and state representative survey collection about school data. Called the "School and Staffing Survey," or SASS, this data is limited to salary information for administrators and public and private school teachers. The center is investigating the inclusion of school-level data collection in the SASS in the near future. SASS is a national and state representative sample of schools. Its first cycle was conducted during the 1987-88 school year. The second cycle of SASS took place in 1990-91 and the third cycle was in 1993-94. The next expected collection of the SASS is scheduled for 1999-2000.

[8] Speakman, S.T., Cooper, B.S., Sampieri, R., May, J., Holsomback, H. & Maloney, Larry. "Tracking Expenditures To the Classroom." *School Business Affairs*, vol. 62,no. 2, 99.1-9 (1996).

In 1997 the US Department of Education's Office of Education Research and improvement published a study entitled, "Development of a School-Level Reporting System on Administrative Spending." The report details NCES's efforts to "present uniform state and school district financial data in a manner that can assist state education agencies (SEA) and school districts in benchmarking their own expenditures." The report also notes that one of the most important components of any data system for reporting expenditures is the potential usefulness of the data to accomplish the policy objective of reducing administrative overhead at the state, school district and school levels.

Obtaining School-Level Finance Data for the Nation

NCES is employing various strategies to collect and report school-level financial data for the nation. The following strategies may be used by state education agencies and school districts to "benchmark" their schools:

- NCES is exploring adding the collection of school-level financial information to the Schools and Staffing Survey (SASS), however, the "model" of school-level finance estimates to be employed is still under study.
- NCES is also contemplating becoming a repository of extant school-level financial data. For example, Coopers & Lybrand has acquired an extensive proprietary database of school districts and schools that have used the In$ite software, but these data are currently unavailable to researchers. NCES could "house" these administrative record systems for education finance researchers who wish to analyze these data.
- NCES also is considering an experimental electronic collection, called "data harvesting," which identifies financial information for school districts and schools from state web sites. NCES would then have a "home page" that points to the sites where school-level finance information is located, and an Internet browser could obtain the data. This would only be practical in those states that have a school-level finance reporting system.[9]

The results of a 1997 NCES review of state school-level reporting noted that, "the last three years have witnessed a surge of interest at the state and local level in the collection and reporting of school-level finance information."[10] In contrast with the situation in 1994, when only three states had implemented this type of collection statewide, in early 1997 at least eight states with school-level finance collections, according to an informal review of state activity in this area.

IX. Policy Questions and Basic Issues to Consider Prior to Implementing A School-Level Data System

This section of the report is included to familiarize lawmakers with various policy considerations in establishing school-level data systems. After posing a series of policy questions, we present some of the more basic issues that policymakers should take into consideration prior to implementing a school-level data system.

[9] U.S. Department of Education. Office of Educational Research and Improvement. (OERI) "Development of a School-Level Reporting System on Administrative Spending." Washington,D.C. (September 1997).
[10] OERI, p.15

Policy Questions to Consider

- Will a school-level data system enhance legislative oversight of state general fund and earmarked appropriations to the K-12 education system?
- What policy questions should school-level data be able to answer?
- Can school-level data help answer questions and concerns about special education expenditures? For example, Florida is able to classify expenditures for special education in an "exceptional student" category. Texas also collects information relative to its special education students.
- Is it possible to track differences in spending by public schools and charter schools? As of February 1999 there were 76 charter schools in Florida, 15 in Ohio and 128 in Texas, however, charter school data is spotty at best for all three states.
- Can we collect information on capital outlay at the school level? This is becoming more and more important as states continue to defend their policies toward state aid for capital purposes. Arizona was successfully sued by school districts that challenged the manner by which the state provided state aid for school facilities. Two pending suits have been filed by school districts in Colorado and New Mexico challenging the lack of funding for school construction in those states. Additionally, as part of its Program Cost Analysis Report Series, Florida is able to ascertain capital outlay expenditures per school; as well as per student costs for school operations through the Florida Indicators Report.
- Are we able to analyze school-level data to examine if the data can be linked to student performance? This is arguably the most important capability for policymakers using SLD. At present the research literature indicates that more needs to be done in this area.

Basic Issues to Consider

- What is the burden on school districts to collect and input the data?
- What is the burden on school districts to maintain the computerized infrastructure or will the state provide this function?
- What burden will be placed on individual schools to prepare information for the district and ultimately the state?
- Is state funding adequate to provide schools and districts with resources to accomplish designated goals for going to an SLD system?
- How is the cost-effectiveness of an SLD database measured?

X. Conclusion

Support for school-level data analysis stems from the belief that policymakers are out of tune with what actually happens to financial resources once the state has made an appropriation. In the current budgetary climate, with so many other items (corrections, Medicaid, highways, etc.) competing with education for sizable shares of the state budget, lawmakers want to know that dollars are being spent effectively and efficiently at the school level. The use of school-level data analysis is beginning to give legislators, governors and others important data so that they can make better policy decisions around K-12 finance. There is also hope that eventually SLD systems will present a clearer understanding of the relationship between money expended and learning outcomes.[11]

[11] Peternick et.al., p. 317.

Also, both for the three states that are the focus of this report and for other states, there is a trade-off between how much detail a state should collect and the cost-effectiveness or usefulness of such data. Only policymakers in individual states can make this determination. As noted by Peternick, Sherman and Guarnera in their case study of Ohio school-level data collection, employing the information in its most basic form, school-level data can provide a more detailed and accurate account of the amount and use of fiscal resources at both the district office and school site. In addition, school-level data can provide valuable information regarding the equity of the distribution of educational resources, the relationship between school expenditures and resources on the one hand, and student outcomes on the other.

Appendix A

School-Level Data Collection: A Review of the Research

The last decade has evidenced a growing interest in school-level data collection. Educational policies are changing rapidly in the United States towards district decentralization, democratization, and school level management. State policymakers are eager to find a proven mechanism for granting additional school-level flexibility to meet district, state, and national educational goals that also address concerns for fiscal accountability. Accordingly, as districts have implemented school-based budgeting and resource allocation, an increasing body of research is being produced.

This section of the report presents reviews from the most recent school-level studies. We begin with a compilation summarizing the research to date before presenting three broader case studies. Because of the complexity of the case studies, we have chosen to present them individually.

Researchers have highlighted several informational and policy issues that either required or would be greatly enhanced by the use of school level data. Among them are the following:

1. Speakman et. al. (1997). Current policy trends are moving towards an increase in power at the school site. Information on the school level will enable better management of resources

2. Bush and Odden (1997). Focuses on current policy trends toward accountability. "School level data could play important roles in more effective state accountability systems. With such data, states and districts could track to the site and even to the student whether resources were being used as intended by state law."

3. Hertert (1996). In relationship to court cases that have focused on equity, it is imperative to effectively study what equity includes, because district level data does not necessarily show how resources are being spent.

4. Verstegen (1998). Adequacy has emerged as a new finance construct in the third wave of litigation (90's). "Discussions of the adequacy of resources would be enhanced by use of school level data."

5. Monk (1992). This centers on productivity analysis as the measurement of an output (student achievement) based on a specified unit of input (for example, per-pupil expenditure, teacher's education level).

Article: "Ohio: A Case Study in School Level Data Collection"
Authors: Peternick, Sherman and Guarnera.
Journal*: Journal of Education Finance*, vol. 24, no. 3, Winter 1999

The case study involved the following types of schools: Ohio: 3,600 schools (63 percent elementary, 17 percent middle, 20 percent high), 1993-94' school year. .

The authors cite three reasons for moving to school level data:

- Belief is growing that the most critical education activities are those closest to the child (at the school level).
- Interest is increasing in measuring outputs or processes rather than inputs.
- Advancement in technology has made it possible to collect and analyze financial information at a level of detail that closely mirrors the education process at the school level.

The use of school level has the potential to accomplish the following:

- Answer questions about the distribution of expenditures and resources in school districts and schools.
- Provide a more detailed and accurate account of the amount and use of fiscal resources.
- Provide information regarding the equity or fairness of distribution (assuming that the underlying value or basis of judgment is made explicit).
- Address issues in relationships between resources and student outcomes.

Summary of Findings

- Expenditures for classroom instruction represented about 85 percent of total school level expenditures, when school operations (transportation, plant maintenance, and so on) were excluded from spending.
- Expenditures for school administration represented about 8 percent of the total.
- Expenditures for support services for students was 4 percent of the total.
- Expenditures for instructional staff 3 percent of the total.
- Total school level expenditures per student were highest in high schools at $3,737; lowest in elementary schools at $3,135;and in between in middle schools at $3,549.
- There was little difference in the share of total expenditures spent on instruction in different types of schools.

Policy Implications

Gearing up to collect school-level data requires a great investment of time and resources for state personnel, training, collection, and certification. It is important to weigh this against the potential benefits.

These analyses may be useful references in taking the initial step to identify areas of greatest need and conduct analyses to figure out how best to respond to court decisions. In constructing new law -- whether it focuses on new state education, finance programs, tax laws or other issues -- those involved will need school level data to assess whether the proposed changes should and will diminish the illegitimate variability in these areas.

School-level data are critical for discussions regarding the efficiency of various schools and programs. Information on what schools spend on compensation for teachers and other school personnel are useful in union negotiations.

Problems with school level data

- School-level data do not include all expenditures (transportation, utilities and supplies can often be purchased at the district level at cheaper rates).
- Personnel sometime work at more than one school; therefore, counted at the district level (music, and art teachers, for example).
- Where are outside resources accounted for (money from businesses, foundations, donated parent and community resources, and so on)?
- Where are teacher benefits, retirement, etc., accounted for?

Article: "Measuring Equity at the School Level: The Finance Perspective
Authors: Berne, and Steifel
Journal: *Education Evaluation and Policy Analysis*, no. 4, 1994

Case study: City of New York analysis of the budgets and expenditures of 32 community school subdistricts and approximately 800 schools in 1992.

Why are district level data being challenged?

- Most critical activities are closest to the child.
- Interest is increasing in looking at processes, outputs and outcomes rather than financial inputs.
- Advancement in technology has given us the ability to collect and analyze information.

From a school finance perspective, horizontal equity --defined as the equal treatment of equals -- might take on real meaning at the school level, in terms of financial resources. This is particularly true if funding streams coming to the school can be separated.

In addressing vertical equity -- defined as the unequal treatment of unequals –school-level data might also make it easier to measure whether more financial resources are available for students in poverty, those with learning disabilities of various kinds or languages other than English.

Methodological Issues at the School Level

What is the appropriate definition of school?

If you are looking at all funds distributed to the children would you also include joint resources or those resources shared with the district?

Should the definition of school be program based or building based?

Quality Issues

"We expect that the variability of the quality of data at the school level is much wider than at the district level, and researchers will need to take this into account as they analyze and interpret the data.[12]"

- In some cases, the data might have been collected for reporting purposes and not analytic purposes, therefore, leading to questions of quality.
- The complexity of school-level data can be greater at the school than at the district level. Thus, it is necessary to understand fully the definitions and coding conventions so that the analysis is as accurate as possible.
- Does the data describe the full dollar cost of the resources? For example,in some situations, teachers' salaries may be recorded at the school level, but other parts of their compensation package (such as pensions and fringe benefits) are not assigned to schools. This is a serious problem, because in most cases the pension and fringe benefit costs range between 20 and 35 percent of salary cost.
- Question exist about the extent to which the research will capture the full set of resources at the school level, including resources obtained from the community and the commitment of time on the part of parents, teachers, and community members. Accounting for these resources is normally left out of district analyses, but it might have a greater influence at the school site level.

Pupil Counts

The pupil count should match the resources variable. For example, general education pupils should be considered in relationship with general education dollars and special education pupils with special education dollars.

Conclusions

- We discovered an alarmingly low level of per-pupil general education budget for elementary and middle schools ($2,250,compared to almost $7,000 total budget per pupil in the district). Although, we have accounted for the difference in terms of budgets for reimbursable programs, high schools, special education, maintenance, fringes and so forth, further research on whether additional resources should reach the child is clearly needed.
- In the general education category, poorer subdisticts receive more funds per pupil in non-allocated, district office and indirect categories, but not usually in allocated and direct categories. This is consistent with the claim by many school districts across the county serving poor children that non-classroom management and oversight burdens are substantial. The policy question is whether these results are necessary or productive and whether ways can be found to get more resources to poor children.
- Analysis of teacher salaries found that poorer students are taught by less experienced, less educated teachers. This raises the critical policy question of how to better allocate the teacher resources within urban districts. Regardless of how we answer these questions, the line of

[12] Berne, R. and Stiefel, L. "Measuring Equity at the School Level: The Finance Perspective." *Education Evaulation* and Policy Analysis, no.4, 1994.

inequity is consistent with the recognition that measures of dollars alone are not sufficient in an equity analysis and that to some degree the education process must be examined.

- In terms of vertical equity with respect to poverty, this initial examination indicates that the glaring inequities that have been commonplace at the state level do not exist within New York City. Nevertheless, the distribution of teachers in high and low poverty subdistricts sounds an alarm about the quality of personnel resources that may be a concern in many districts. And despite the improved analysis that these data allow, we have only begun to ask questions about facilities, special education, and educational outcomes.

Article: "School-Site Finance and Urban Education Equity"
Authors: Cooper et al.
Journal: *Education and Urban Society*, vol. 29., no. 2, February 1997

The Impact of School Level Data on Judicial Issues: Study Findings

Judicial efforts in the last 25 years to equalize school expenditures have used interdistrict per pupil spending as a yardstick of financial equity, even though most educators recognize that schools, classrooms and pupils are the most important units of analysis.

Reliance on the district as the unit of analysis is understandable, given that revenues are raised by and for districts and that they are distributed on the basis of district characteristics. The use of district data, however, may not be appropriate if the goal is to measure and thereby promote a more equitable allocation of funds among students, (Hertert, 1995).

Educational policies are changing rapidly in the United States towards district decentralization, democratization, and school level management, shared decision-making and budgeting. Cooper et al. argue that these reforms "have a powerful relationship to those efforts designed to equalize school level resources. To a large degree, therefore, the growing interest in school site financial equity is a product of these shifts to school level control and responsibility."

Conclusions

Cooper et. al., conclude that new concepts and data by school sites increase the potential for the following major policy changes in education:

- Legal action: Using school site financial information to frame legal decisions could lead to greater pressure on schools to improve their school site accounting and reporting processes.
- More Sophisticated views of equity: school equity involves much more than school district spending levels. "It involves systemic differences among levels of education, with elementary schools often getting short shrift, and the powerful effect of special education costs that run much more than regular education.[13]"
- The Ability to Relate Costs to Results: Moving to school site equity leads itself to a closer analysis of where to spend money to get better results.

[13] Cooper et al., "School-Site Finance and Urban Education Equity." *Education and Urban Society*, vol.29, no.2, February 1997.

Appendix B

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