After a decade of dormancy there is suddenly a great interest among educators and policy-makers in public school finance, spawned by: successful court decisions in several states overturning existing state public school finance formulas; a popular book alleging more severe educational segregation than in 1954; congressional proposals for school finance studies; national education goals; and financial exigencies of a prolonged recession. This paper explores the disparity between the types of school finance questions that have been recently raised by these developments and the ability of any national data collection based upon existing state administrative records to address those questions. The paper examines a proposal for new collection mechanisms and the collection of extraordinary fiscal data compared with extant collections, and assesses the improvement in the ability to answer policy-analytic questions. Eight tables and one figure are included. (19 references) (Author)
What Should We Know About School Finance?

William J. Fowler, Jr.

OERI Senior Associate
Office of Educational Research and Improvement
National Center for Education Statistics
U.S. Department of Education

A paper
presented to the
American Education Finance Association
Annual Meeting in New Orleans, Louisiana

March 21, 1992

This paper is intended to promote the exchange of ideas among researchers and policy makers. The views are those of the author, and no official support by the U.S. Department of Education is intended or should be inferred.
Abstract

After a decade of dormancy, there is suddenly great interest among educators and policy-makers in public school finance, spawned by: successful court decisions in several states overturning existing state public school finance formulas, and implementing extremely unpopular legislative solutions; a popular book alleging more severe education segregation than in 1954; congressional proposals for school finance studies; national education goals adopted by the President and state governors; and the financial exigencies of a prolonged recession. This paper explores the disparity between the types of school finance questions that have been recently raised by these developments, and the ability of any national data collection based upon existing state administrative records to address those questions. The paper examines a proposal for new collection mechanisms and the collection of extraordinary fiscal data compared with extant collections, and assesses the improvement in the ability to answer policy-analytic questions.

I. The origins of a renewed interest in school finance

In the 1980s, school finance research and data seemed to have matured into an arcane and obscure academic discipline, with public interest dormant. Public attention in school finance rose briefly in 1978 with the tax limitation movement, Proposition 13 in California, which limited local property taxes, including those for public school districts. Public attention sporadically focused upon school finance litigation alleging unequitable school district per-pupil expenditures within a state, but with little real concern: New York, Maryland, and Ohio all had their state school funding systems ruled constitutional, while only states of low per capita income, such as Arkansas and West Virginia, had state courts overturn the state funding systems for public education (CCSSO, 1990: 8). Adding to public apathy, some court cases took almost a decade to proceed through the courts to the state supreme court. In addition to the lack of interest of the public, two primary sponsors of school finance studies, the Ford Foundation and the National Institute of Education, declined to continue funding fiscal research after 1981 (Barro, 1987, p. 2).

In stark contrast to this picture of little interest in school finance, by 1992 five events have coalesced to renew public and private interest in school finance: successful court challenges in 1989 and 1990 in several states to existing state public school finance formulas, using a strategy of new types of evidentiary data; a popular book alleging more severe racial segregation with concomitant financial deprivation in public education than existed in the nation in 1954; congressional proposals for public school financial studies; the announcement by the President and state governors of national public education goals; and the financial exigencies of a prolonged recession that began in 1990. Each of these events contributed to a renewed interest in school finance, and are explored below.

A. State court decisions overturning state public school funding formulas.

Presently, 23 states find their public school financing formulas under legal attack (Hickrod, 1991). Ordinarily, such challenges were, in the past, not considered formidable by state policy analysts, as they often took at least a decade before being heard by the state supreme court, and, about half the time, resulted in the affirmation of the existing system. However, the finding of the New Jersey Supreme Court in 1990 that that state's school finance formula violated the state constitution heralded a new era of school finance cases, in which formulas specifically created to remedy a prior court decision of inequity might be overturned within a few years, if the new formula proved modestly unsuccessful. The New Jersey decision was preceded by courts in Texas (1989) and Kentucky (1990) declaring their systems invalid. These new precedent-setting cases made defeat of formulas thought to be challenge-proof much more probable by the
highest state court declaring the formula’s operation in violation of the state constitution, and requiring a far more school finance data than ever before requested. The current status of challenges to state school finance formulas appears in Figure 1.

**Figure 1**

**Results of School Finance Litigation**

New Jersey is a very wealthy state, with the second highest per capita personal income in 1989, and a 1986 gross state product per school-age child that ranks sixth highest (CCSSO, 1990). New Jersey’s state average per pupil current expenditure of $7,991 is only below that of Alaska, D.C., and New York (NCES, 1992). In the Abbott v. Burke state supreme court decision, plaintiffs’ allegations were that certain urban school districts (Camden, East Orange, Irvington, and Jersey City) did not provide equal educational opportunity for students in their school districts as a result of inadequate state funding. In 1975, the New Jersey Supreme Court had overturned the state’s funding system (Robinson v. Cahill), only to have the plaintiffs return to court in 1981, again alleging insufficiency.

The breadth of the evidentiary data presented to the court in 1989 and 1990 is impressive, particularly in comparison to challenges brought only a few years before. The plaintiffs' interrogatories in
Abbott, for example, sought information about school districts that went well beyond the traditional basis of court cases that only pointed to disparities in school district current expenditure per pupil and property wealth per pupil. Evidence presented in the court case included school district: education and municipal tax rates; fiscal capacity, i.e., the ability to raise more money for education if so desired; the age and condition of the facilities and school site; the costs of providing educational services, including teachers' salaries and benefits; additional state aid for students with special educational needs; the types of educational programs offered by school districts; socioeconomic status (SES); and student demographics and outcomes.

To provide much of this evidentiary data, the New Jersey state department of education had to supplement its routine administrative data base with special studies undertaken by consultants hired from outside the state. The litigants emphasized disparate school district tax rates, expenditures, school programs and facilities, and student outcomes, accompanied by differences in school district SES. The state defendants challenged the plaintiff claims of a nexus between school district spending and student outcomes, but were unsuccessful. The court ruled that the state had to provide the financing for the lowest SES school districts to spend, on average, what the highest SES school districts spend.

In enacting the Quality Education Act (QEA) of 1990, New Jersey had to budget an additional one billion dollars to provide for the court decision. The enactment of state taxes sufficient to fund the QEA created one of the more memorable tax revolts in New Jersey history (WSJ, 1990). As a result of a radio call-in show, citizens opposing the new taxes formed an anti-tax group called "Hands across New Jersey" and obtained more than 400,000 signatures demanding repeal of the new taxes. A Democratic majority in both houses of the state legislature was replaced by a Republican majority. No longer was the public in a state unaware and indifferent to school finance.

Unlike the school finance cases of the 1980s, which passed almost without public notice, the Texas, Kentucky and Texas court decisions overturning the state public school financing system became very visible to the public of each state through increased taxes. The legislatively derived solutions for each of these court decisions have been almost uniformly unpopular with the public of each state.

B. A popular book alleges racial discrimination in financing public schools.

The success and speedy nature of these court challenges to state school financing systems has spurred the interest of educational reform authors. A nonfiction book was written in 1991 by a nationally renowned author and commentator on American education, Jonathan Kozol, and is attracting a wide, sympathetic audience. Savage Inequalities quotes students, staff and parents from school districts that Kozol asserts maintain the worst school buildings and conduct the worst educational programs in the nation (Kozol, 1991). Most of the districts have high concentrations of minority students and low expenditures per pupil (East St. Louis, New York City, San Antonio, Chicago, Camden). Since interviews in similarly situated school districts which maintain adequate or laudatory facilities and educational programs are not presented, the reader cannot fail to assume that the description applies throughout the nation. Indeed, Kozol contends the public schools in America are not only segregated and unequal, but "... in many cases, are more segregated and less equal than in 1954" (emphasis his). No one can read the book and fail to be emotionally moved to remedy the conditions described.

School [in East St. Louis] is resumed the following morning at the high school, but a few days later the [sewage] overflow recurs. This time the entire system is affected, since the meals distributed to every student in the city are prepared in the two schools that have been flooded. School is

---

1 The author was Supervisor of School Finance Research in the New Jersey Department of Education from 1986-1987.
called off for all 16,500 students in the district (p.23). ... In the same week, the schools announce the layoff of 280 teachers, 166 cooks and cafeteria workers, 25 teacher aides, 16 custodians and 18 painters, electricians, engineers and plumbers... teachers are running out of chalk and paper, and their paychecks are arriving two weeks late (p.24).

C. Congressional proposals for school finance studies.

Congressional action has both preceded national attention and paralleled the success of the state court decisions. Legislation was introduced into Congress which requested national studies of the issues raised in the Texas, Kentucky, and New Jersey court decisions. Accompanying the "Fair Chance Act" was a Congressional Research Study (Riddle, 1990) that assessed school district expenditure equity within each state, identifying those states that are inequitable on two measures (see Table 1). The "Fair Chance Act" proposed denying federal education funds to states determined to have inequitable financing of expenditures until the states remedied the expenditure inequity found. In addition, the hearings for the legislation provided a media forum in which to alert the nation to the problem.

Table 1

<table>
<thead>
<tr>
<th>States with Inequitable School District Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>(on two equity measures, by organizational type)</td>
</tr>
<tr>
<td>Elementary School Districts</td>
</tr>
<tr>
<td>Illinois</td>
</tr>
<tr>
<td>Montana</td>
</tr>
<tr>
<td>Unified School Districts</td>
</tr>
<tr>
<td>Missouri</td>
</tr>
<tr>
<td>New York</td>
</tr>
<tr>
<td>(on one equity measure, by organizational type)</td>
</tr>
<tr>
<td>Elementary School Districts</td>
</tr>
<tr>
<td>New Hampshire</td>
</tr>
<tr>
<td>New Jersey</td>
</tr>
<tr>
<td>Secondary School Districts</td>
</tr>
<tr>
<td>Illinois</td>
</tr>
<tr>
<td>Massachusetts</td>
</tr>
<tr>
<td>Montana</td>
</tr>
<tr>
<td>Unified School Districts</td>
</tr>
<tr>
<td>Alaska</td>
</tr>
<tr>
<td>Michigan</td>
</tr>
<tr>
<td>Ohio</td>
</tr>
<tr>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Texas</td>
</tr>
<tr>
<td>Wyoming</td>
</tr>
</tbody>
</table>

Recently, Mr. Kildee, D-Mich., proposed an amendment to H.R. 3320, the Neighborhood Schools Improvement Act (See Table 2). In addition to the provisions in H.R. 3320, the amendment provides for a detailed description of each state's school finance program; for NCES to review these data to determine adherence to the standard definitions and any corrective analysis necessary to achieve consistency in these data; and to submit these data to the National Academy of Sciences for policy analysis, particularly regarding the disparities in educational expenditures, and the reasons for such disparities among LEAS both within and among states.2

The Riddle equity study and the Fair Chance Act represent the traditional, often unsuccessful school finance evidentiary data presented in court cases prior to Abbott to challenge the constitutionality of a state school funding system. However, the data requested in the amendment to H.R. 3320 represents the expansion of evidentiary data first introduced with success in the New Jersey school finance challenge.

Table 2

The amendment mandates that each state which receives funds under H.R. 3320:

"shall submit to the Secretary a biennial report on revenues available to, and expenditures by, each local educational agency in the state during the second preceding year. This report shall be developed in accordance with data definitions developed and published by the National Center for Education Statistics, and shall include at least the following information for each local educational agency within the State -

(A) sources of revenues, identified by level of Government and type in the case of taxes;
(B) tax assessment rates, policies, and practices;
(C) types of educational services offered;
(D) pupil enrollment, average daily attendance, and average daily membership;
(E) demographic information on student population;
(F) type and responsibilities of each LEA, including a description of grade levels served;
(G) age and condition of facilities, including the percent of budget expended for maintenance and operation;
(H) ability of the LEA to raise additional revenues; and
(I) costs of providing elementary and secondary education services."

D. The adoption of America's Education Goals.

On September 27 and 28, 1989, at the University of Virginia in Charlottesville, the President held an education summit with the nation's governors, and agreed to:

2 On 2/26/92, Mr. Kildee and Mr. Ford (also of Michigan) introduced a replacement bill, H.R. 4323, with some modifications to the financial variables to be collected in a nationwide study.
establish a process for setting national education goals; seek greater flexibility and enhanced accountability in the use of federal resources to meet the goals, through both regulatory and legislative changes; undertake a major state-by-state effort to restructure our education system; and report annually on progress in achieving our goals (America 2000-73).

On April 18, 1991, the President outlined a national education strategy which announced six ambitious education goals (See Table 3).

Table 3

America's Education Goals

1. By the year 2000, all children in America will start school ready to learn.

2. By the year 2000, the high school graduation rate will increase to at least 90 percent.

3. By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible employment in our modern economy.

4. By the year 2000, U.S. Students will be first in the world in science and mathematics achievement.

5. By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

6. By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

The adoption by the President and governors of America's Education Goals to be achieved by the year 2000 has created media and public interest in progress toward these goals. Since the announcement of America's Education Goals, a commission has been formed to devise a means to measure progress toward each goal.

To date there has been no public discussion of what the current level of spending for teaching, for example, geography, or maintaining a drug-free and violence-free school environment. If, however, satisfactory progress toward a goal is not achieved, there may arise public interest in the levels of spending for each goal, and the level of increases over time.
E. The effects of a prolonged recession on school finance

According to the National Bureau of Economic Research, the nation slipped into recession in July, 1990, with expectations that the downturn would be average or less severe than average, lasting between 12 and 18 months (NBER, 1991). As of February, 1992, the number of unemployed remained at 7.1%, and the number of jobs declined by 91,000 in January, suggesting that a turnaround was not yet apparent (BLS, 1992). The prolonged recession has had an adverse effect upon the ability of states to collect revenue from their state sales and income taxes, and upon local government revenues collected from ad valorem property taxes. These losses of revenue have led to reductions in the amounts of state money used to compensate property-poor school districts for their lower ability to raise money from their ad valorem taxes. In addition, the lower value of commercial and residential property has led to the collection of lower revenues at the local level. Thus school districts faced simultaneous reductions in revenue from their own local tax base, and reductions in state revenue. These revenue reductions have led school districts to adopt various strategies for reducing school district expenditures. Some school districts have expanded the use of student user fees for extracurricular activities, while others have reduced teaching and support staff.

The dramatic economic downturn in 1990, with its concomitant losses of revenue for school districts and calls for increased local and state taxes, helped focus renewed public attention on school finance. In many school districts, reduced local and state revenues are causing reductions in staff and services, exacerbating inequalities between poor and wealthy school districts. School district responses to financial adversity are especially important because they demonstrate the choices made by school boards and administrators regarding essential educational services that must be maintained, rather than discretionary educational activities.

II. What Don't We Know About School Finance?

The dramatic developments in American society described above certainly make obsolete the kinds of school finance knowledge acquired by academics and policy analysts prior to the nineties.

[Prior to the 1990's] school finance researchers in the U.S. have spent very large fractions of their time and energy studying distributions of funds among local school districts within States, with heavy emphasis on the equity of those distributions. In comparison, other important aspects of resource and fund distribution have received little attention (Barro, 1988, p. 3).

The New Jersey school finance court case turned on presenting a stark picture of inequity to the court, alleging that the student outcome, programmatic, and facilities' deficiencies described were the product of insufficient state funding and locally overburdened fiscal capacity. Kozol's book is the logical extension of the successes of the Texas, Kentucky, and New Jersey court cases, maintaining that such inequity should be broadly viewed as part of a national pattern of educational deficiencies for a racial minority. Congressional calls for nationwide studies containing the information in the court cases are justifiable, considering the nature and severity of the allegations. A rational next step is to understand if a national recession has worsened the conditions described, and if America's Education Goals are unobtainable in some school districts as a result of insufficient funding.

Unfortunately, the court cases described above, based on school district data from state administrative systems supplemented by special studies, have created the impression that the types of information requested in H.R. 3320 are readily available in a national data base for assessing fiscal adequacy. The comparison of those elements that are routinely available versus those that are not appear in Table 4. Despite an extensive expansion in 1989 and 1990 of fiscal data collection at both the state and school district level by the National Center for Education Statistics (NCES), no such national data base
exists, nor can one be derived from extant state administrative data bases and collection procedures.

**Table 4**

<table>
<thead>
<tr>
<th>Available:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) sources of revenues, identified by level of Government and type in the case of taxes;</td>
</tr>
<tr>
<td>(D) pupil enrollment;</td>
</tr>
<tr>
<td>(E) demographic information on student population (in 1993);</td>
</tr>
<tr>
<td>(F) type and responsibilities of each LEA, including a description of grade levels served;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unavailable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(B) tax assessment rates, policies, and practices;</td>
</tr>
<tr>
<td>(C) types of educational services offered;</td>
</tr>
<tr>
<td>(D) average daily attendance, and average daily membership;</td>
</tr>
<tr>
<td>(G) age and condition of facilities, including the percent of budget expended for maintenance and operation;</td>
</tr>
<tr>
<td>(H) ability of the LEA to raise additional revenues; and</td>
</tr>
<tr>
<td>(I) costs of providing elementary and secondary education services.</td>
</tr>
</tbody>
</table>

Perhaps most important of the fiscal data requested by the Neighborhood Schools Improvement Act (H.R. 3320) but not available in a national data base is the ability of the LEA to raise additional revenues. This refers to school district fiscal capacity. In most states, school district fiscal capacity is reflected in the state's school aid act by per pupil property wealth. The property wealth per child often is a blend of residential, commercial and industrial wealth, with farms and utilities being particularly difficult assessments within commercial properties. States differ in regard to using assessed wealth (often 25% to 50% of full value) versus using equalized wealth. One study suggested only 29 states use equalized value (Schwartz & Moskowitz, 1988). In addition, the value of the school district is dependent upon how recently the property was assessed, and the number of exemptions (See Germs, Guthrie, Pierce, 1978). These problems extend not only to per pupil property wealth, but also to tax assessment rates, policies, and practices, which were data also specified in H.R. 3320, but not available in a national data base.

The noncomparability of the per pupil property wealth of school districts, both within states and between states has caused school finance researchers to turn to other, more comparable surrogate measures, such as school district per capita income. Recently, some economists have created a wealth measure similar to the representational tax system (RTS) that the Advisory Commission on Intergovernmental Relations (ACIR) uses to assess state wealth (Green, 1990). Considerable theoretical work in this area is still required, however.

Beyond the fiscal data requirements for school finance equity court challenges, what is the extent of our lack of knowledge in school finance? A summary appears in table 5. The nation's school finance data base is so rudimentary that the U.S. is the only country in the world that cannot report public education expenditures by level, that is, for elementary education separately from secondary education. In addition,
most policy analysts wish to know what is spent for educational programs, such as special education.

Few state administrative programs can report expenditures by subject matter, that is, for the regular educational program, for special education (of the mentally and physically handicapped), for compensatory education (of children with below-grade achievement), for subjects identified in America's Education Goals (English, history, geography, science, mathematics). For example, imagine the school system's expenditures for teaching special education. The minimum fiscal data required to report expenditures for the special education program include the special education teacher's salary and fringe benefits, and the special education supplies and equipment purchased. Aside from those teachers exclusively devoted to teaching only special education, the department chairperson often teaches several classes, and the portion of his salary and benefits devoted to special education instruction must be prorated, the rest being attributed to school administration. More complex fiscal program reporting systems determine the number of children in the special education program, and their cost in operation and maintenance and school transportation. Surprisingly, some school systems maintain such detailed programmatic expenditure information for their own purposes, such as reporting to the school board, or to the public.

The education program often cited to achieve the first of America's Education Goals, all children will
start school ready to learn, is Head Start. The Head Start program provides preschool education for students, particularly those in poverty. Like subject matter expenditures, most state administrative record systems containing school district expenditures do not contain the detail to provide expenditures for preschool education programs, including Head Start. One problem is that expenditures for day care, which involves no education component, are not separable from preschool education. Head Start poses a special problem, however. Most often (about two-thirds of the time) the Head Start educational program is not administered by the school district, but rather by a non-profit educational agency that receives federal funds, from the Department of Health and Human Services. The President has proposed a dramatic expansion in the Head Start program in fiscal year 1992. Little of these monies, however, will appear as preschool education expenditures under the current fiscal data reporting systems.

Not only are expenditures for programs unknown. Educational reforms implemented by some states, such as minimum teacher salaries and teacher merit pay plans cannot be differentiated from other expenditures, either at the state level or at the school district level.

Surprisingly, although total employee benefit expenditures by state and school district can be reported, the mix of employee benefits offered by employers cannot. The Employment Cost Index (ECI) from the Bureau of Labor Statistics is only able to report a combined index for salaries and fringe benefits at the national level for local government education workers, but not at the state level. No one knows which states or school districts provide group insurance, or social security contributions, or retirement contributions, or tuition reimbursement, or unused sick leave payments for local school district employees, and whether or not such benefits extend to all school district employees.

This list, is not exhaustive, but serves to demonstrate that much of the raw fiscal data for sophisticated statistical analyses about school districts simply does not exist at a national level, nor, unless supplemented by additional special studies, in most state administrative financial record systems.

III. What Do We Now Know that We Didn't Before in School Finance?

The foregoing discussion has only briefly mentioned the extensive redesign of the elementary and secondary finance data collection by the National Center for Education Statistics, and the funding of an "Education Finance and Productivity Center" by the Office of Research. None of the above should be construed as lessening the reform efforts of the Department of Education's principal components. Nevertheless, the data problems enumerated above have become more apparent and more troublesome as the quality and comparability of the current data collection improves. In order to understand how rapidly progress can be achieved in obtaining new financial data, it is useful to briefly mention NCES accomplishments since 1987.

The new NCES redesign of the State-level school finance data collection yields more detail regarding state expenditures for elementary and secondary education. Specifically, NCES can now report State-level expenditures for instruction, student support services, administration, operation and maintenance, and student transportation, with detail on salaries, benefits, purchased services, supplies and equipment. Additional detail permits a knowledge of the expenditures for school renovation and construction.

NCES has jointly conducted a school district financial survey (F-33) with the U.S. Bureau of the Census (Governments Division) for all regular school districts in the country for the school year 1989-1990. [NCES had not conducted a school district financial collection since the early 1980's]. These financial data should be released by Census in early 1992. These data permit the assessment of revenue and expenditure equity for types of school districts within states, as well as inter-state revenue and expenditure equity.

In 1992, NCES, together with the U.S. Bureau of the Census (Governments Division) will conduct another school district universe collection. This 1992 collection will proceed with a greatly expanded
financial survey form, collecting more school district financial detail than ever before. Nevertheless, the survey form will not contain data items that can respond to the information requested in Table 5.

In 1993, the NCES School District Mapping Project will be completed, which will permit 1990 decennial population data to be added to the 1990 school district financial collection for all school districts in the nation. These data will permit identification of numbers of children in poverty and "at-risk" children in each school district.

NCES state financial data have always been obtained from audited state administrative records, causing approximately a year's delay. NCES has instituted an "early estimates" system that reports current year state education revenues and expenditures, and estimates the next two years.

All but nine states are currently reporting financial statistics in a uniform manner, either having adopted the NCES accounting handbook, or using an NCES procedure termed a "crosswalk". NCES published in 1990 a new chart of accounts, to assist standardizing state reporting. Financial Accounting for Local and State School Systems, 1990 has been widely distributed to state data respondents, and to school districts throughout the nation. NCES has developed a "technical assistance plan" for the original nine "uncrosswalkable" states, who were not using the NCES 1990 accounting handbook, or crosswalk mechanism. The original nine "uncrosswalkable" states were: Alaska; Arizona; Connecticut; Delaware; D.C.; New Jersey; New Mexico; Tennessee; Vermont. By 1992, only Delaware and New Mexico have not adopted the NCES accounting standard, or are "crosswalked".

IV. Why Are We Uninformed About School Finance?

The foregoing makes clear that a prodigious attempt has been made by NCES to expand the school finance data collection and to assure the accuracy and comparability of the data collected from state administrative record systems. The myriad questions that remain unanswered in the face of the largest and most comprehensive school finance data collection undertaken at the national level is troubling. Two aspects of the current data collection effort explain the inability to address the things we don't know about school finance. First and foremost, the current system of accounting is a major impediment to understanding school spending. Until a new system of collecting and reporting education expenditures is devised, policy analysts will not have access to the type of relevant information they desire.

Table 6

<table>
<thead>
<tr>
<th>The Current System of Financial Accounting for School Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objects: Salaries Employee Benefits Purchased Services Supplies Equipment Other</td>
</tr>
<tr>
<td>Functions: Instruction Student Support Instructional Staff Support Central Administration School Administration Operations &amp; Maintenance Students Transportation Safety Office Food Service Operations Intergroup Activities</td>
</tr>
</tbody>
</table>

Page 11
To understand how the current system of accounting is an hindrance to understanding school spending, a brief description is necessary. The NCES financial accounting handbook, *Financial Accounting for Local and State School Systems, 1990*, which is the fifth to evolve from the 1957 version, breaks expenditures into subfunctions and objects. Subfunctions are (see Table 6) categories such as instruction, student support services (attendance and health, guidance, psychological, speech and audiology), instructional staff support services (supervisors of instruction, library services), etc. Objects are expenditure detail within subfunctions, such as salaries, fringe benefits, purchased services, supplies, equipment, and other. Table 6 shows how these subfunctions and objects are typically combined. Salaries for instruction are known, but not a particular instructional activity, such as teaching history. With the exceptions of Delaware and Arizona, all states use this financial reporting system and retain these records for every school district in their state.

In order to report expenditures for elementary education, one would have to be able to identify those school districts which teach only elementary students (prekindergarten to grade 5, or 6), and decide how to treat those school districts which were unified (k-12), or serve intermediate grade students (grades 6-8). To report expenditures for history instruction, the salaries, fringe benefits and supplies of full-time history teachers in each school district would have to be totaled. History teachers that also teach another subject would have to have their salaries and other costs prorated according to the time they devoted to history. The history department chairperson would also have to be treated in this way. Those that utilize this approach, often called program cost accounting, would typically also aggregate operations and maintenance and student transportation costs, and divide them by the number of children being taught history. Program cost accounting was popular two decades ago, but was slowly abandoned because of the enormity of the data base required to determine program costs.

A second obstacle to answering questions of interest in school finance is that current data collection methodologies rely upon the data already housed in state or local administrative record systems. Current federal data collections, based upon state administrative records, often experience a delay in order to allow for independent audits of school district financial records, typically up to a year after the school year. Even assuming that no delay occurred, the financial detail collected by states simply is aggregated at a level that removes financial detail that is of policy interest. Most school districts report their financial condition either on state-prescribed reporting forms, or use a reporting standard from the Government Finance Officers Association (GFOA), termed a comprehensive annual financial report (CAFR). The CAFR uses fund types and presents balance sheets, much in the style of a corporate annual financial report which has the virtue of obscuring, rather than elucidating the financial operation of the school district (GFOA, 1988).

**V. What Should We Do?**

It is apparent from the foregoing discussion that a new approach is necessary to obtain policy analytic school finance data at the level of detail required to be informative. First, the national data collection will have to gather data from something other than state-level financial administrative record systems, because of their high level of aggregation and the time delay in creating them. Second, a new method of collecting and reporting education expenditures is needed. The characteristics of such a new system are shown in Table 7. Not only would the new collection be freed of the present accounting structure, it would take place at the school district level, where all the financial detail resides. The frequency of collection and the level of detail obtained would depend upon the nature of the policy questions that are being asked.
Table 7

Characteristics of a new school finance collection strategy

- The method should not be tied to existing accounting mechanisms, rather it should be associated with the policy questions that it seeks to answer.
- The approach should be independent from existing administrative record systems, and should seek to be more current than present reporting, even if it constitutes an approximation, rather than audited expenditures.
- The new method collection should take place at the school district level, where the financial information resides.
- The frequency of the collection should depend upon whether a time-series enhances the policy-analytic nature of the fiscal data.
- The method can employ representative sampling.

The new method is superior in timeliness, in the level of detail, and in the ability to provide program and other information of a policy analytic nature. Let us examine how this might be accomplished.

No national education finance survey from the federal government now surveys school business officials. However, these are the professionals who have the accounting acumen and the financial data to respond intelligently to a financial survey with the kinds of questions raised above. At most, 15,000 respondents are involved, which compares favorably to NCES School and Staffing Surveys (SASS) of 9,317 public school principals and 58,242 public school teachers, which are samples, rather than universes (Hammer and Gerald, 1990). Many school districts have computerized financial reporting systems, some of which contain flexible reporting, including program reporting. Some, as in California, are able to transmit financial information electronically, or via mailed floppy disk. The Center is encouraging the transmission of financial data electronically, so that in five years, all states will report via these means, unless they decline to do so.

Even in California, which is on the cutting edge of electronic financial reporting systems, small school districts (under 400 pupils) do not use computerized financial accounting systems, and may not even be in accord with Generally Accepted Accounting Principles (GAAP). An alternative possibility is to have school finance enumerators visit school business officials, particularly in small school districts, where reporting systems may not be electronically manipulable.

Table 8 compares the results of this new collection methodology with current school finance information. The power of the new collection strategy enumerated in Table 7 becomes apparent in table 8.

Virtually all of missing information in "What Don't We Know About School Finance?" (Table 5) may be fashioned at the school district level, either through the use of their own financial information system, or through a trained enumerator, who might walk school district personnel through the desired steps to create the information. Certainly, as a first step, NCES might simply inventory the financial reporting systems and their ability to report in all regular school districts in the nation. Similar work has already been conducted at the state level, and has resulted in improved reporting systems and greater uniformity in reporting financial...
statistics. Included in this inventory must be the ability of the school district to use electronic reporting, so that the burden of data collection remains tolerable.


The first half of this paper discussed five trends which are renewing interest in school finance: successful court decisions in several states overturning existing state public school finance formulas, and implementing extremely unpopular legislative solutions; a popular book alleging more severe education segregation than in 1954; congressional proposals for school finance studies; national education goals adopted by the President and state governors; the financial exigencies of a prolonged recession. These trends will lead to more demands for knowledge and a probable increase in state litigation regarding school finance equity. School finance researchers and education policy-makers need to know much more about school district finance than simple per-pupil expenditure equity. Rather, there is a need to know program

<table>
<thead>
<tr>
<th>Table 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparisons of Current Collection and Proposed Collection</td>
</tr>
<tr>
<td>Current Collection</td>
</tr>
<tr>
<td>1. School district financial data only from present accounting and administrative records.</td>
</tr>
<tr>
<td>2. Not available.</td>
</tr>
<tr>
<td>3. Not available.</td>
</tr>
<tr>
<td>4. Not available.</td>
</tr>
<tr>
<td>5. Not available.</td>
</tr>
<tr>
<td>7. Not available.</td>
</tr>
<tr>
<td>8. Not available.</td>
</tr>
<tr>
<td>9. Not available.</td>
</tr>
<tr>
<td>10. Not available.</td>
</tr>
</tbody>
</table>
expenditures for the national goals, for preschool education, for students with special needs (either intellectual or physical), and for educational reform (such as merit pay for teachers), and standardized financial measures for use in studies of student achievement, efficiency, or productivity.

Even the most recent school finance litigation suggests that extant financial reporting systems are insufficient for the needs of the courts in assessing expenditure equity alone. The courts in Texas, New Jersey, and Kentucky wanted far more detail than was normally available from state administrative record systems. However, the existing school finance accounting systems cannot provide the requested information.

The greatest interest of school finance researchers should be the consequences of differences in expenditures for the student, rather than the measurement of expenditure equity. Do inequities in program expenditures lead to inequitable student outcomes, or are most program characteristics independent of expenditure equity? To what extent are the variations in expenditure per pupil simply a reflection of cost-of-living differences between school districts? To what extent are the intolerable conditions described by Kozol the result, not of insufficient funds, but of mismanagement? Obtaining answers to these questions requires school finance researchers to move far beyond the current accounting and financial reporting systems currently in use.

School finance researchers should be closely examining many of the unintended consequences of overturning the current system of financing schools in a state, including the loss of public support for new state funding formulas. Such questions as why a modification in the state school finance formula produces public enmity requires information that goes beyond school district financial data, which was the focus of this paper. But certainly those who undertake to challenge state funding formulas must come to understand public opposition, and how school district residents come to perceive the effects of formula changes. Were the Texas, New Jersey, and Kentucky legislatures too literal in interpreting the court's decision? Why were the remedies perceived by the public as so much worse than the status quo? These are policy questions that demand answers, and suggest that we are only nibbling at the edges of future data needs in this area of inquiry.
References


