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AUTHOR Odden, Allan; Augenblick, John
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ABSTRACT
This report is intended to help state governors, legislators, and educators as they address the problems related to funding education. It is based on the idea that policy-makers can profit from the learning experiences of other states. The first and longest section of the booklet consists of a three-part overview. The first part of the overview summarizes the characteristics of the school finance reforms passed in the 1970s and identifies six major themes: expanded general aid, increased equity, expanded measures of fiscal capacity, special pupil needs, special district needs, tax and spending limitations, and school finance litigation. The second part of the overview discusses the status of all the states in 1977 on a variety of school finance equity goals. The final part reviews major events in 1980 and likely state legislative activities in 1981. The next section of the booklet reviews three general topics associated with school financing: the general fiscal condition of public schools, changing public opinion on schools and taxes, and demographic and enrollment trends. The final section of the report examines recent research findings regarding school finance and provides an overview of issues likely to be of interest to policy-makers in the near future. (Author/JM)

School Finance Reform in the States: 1981

Report No. F81-1

by Allan Odden and John Augenblick
with the assistance of
E. Kathleen Adams, Judith Cohen
and C. Kent McGuire

Education Finance Center
Education Programs Division
Education Commission of the States
Denver, Colorado

Robert C. Andringa, Executive Director

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Allan Odden is the director of the Education Programs Division of the Education Commission of the States. John Augenblick is the director of the Education Finance Center. E. Kathleen Adams is an economist in the Education Finance Center. Judith Cohen and C. Kent McGuire are economic research assistants in the Education Finance Center.

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Executive Summary

After one year in the decade of the 1980s, it is clear that school finance issues are likely to be somewhat different, but not entirely different, from those of the 1970s. While public opinion concerning the schools is on the upswing, resources for education are actually declining. This is the reverse of the situation that characterized the previous decade. States continue to review their school finance systems and to modify them, although school finance reform has become more sophisticated, relying on more research into more issues. In this booklet, research into several areas is summarized.

Litigation has also not abated. Several cases initiated in the 1970s are expected to be heard this year and decisions on appeal are due in Colorado and New York. New school finance litigation is focusing particularly on the needs of cities; municipal districts are pressing many of the newly-introduced and expected cases coming out of municipal districts.

Analysis of the equity of school finance systems indicates that reform has been beneficial to the states. While more has been achieved in reducing the relationship between the wealth and spending of school districts, at least some decrease in the per pupil expenditure disparities of school districts has also been accomplished. This booklet presents the relative equity standing of states using several measures.

Numerous states undertook studies of their school finance systems in 1980, including Delaware, Mississippi, Missouri, New York and Wyoming. Arizona passed a new school finance system in 1980. Oklahoma initiated a study of its system and Nevada is expected to review its system in the coming year. Many states face complex problems this year, however. California and Oregon face revenue constraints. Massachusetts must deal with the impact of its property tax limitation. There is no doubt that the impacts of declining enrollment, inflation and poorly performing state revenue systems are going to be severe in some states.

In many ways, the past year has not been a good omen for the future of school finance. However, despite the problems, it is anticipated that state legislatures will continue their efforts to improve school finance systems and education in the states.

I. Overview

During the decade of the 1980s, it will be difficult to match the fiscal expansion, the progress on equity goals and the level of state activities related to financing public elementary and secondary schools that took place during the 1970s. However, one of the lasting results of the actions in the 1970s has been the "maturing" of public school financing as one of the most visible public policy issues at the state level. Today, the problems related to funding elementary and secondary schools, as well as colleges and universities, are principal policy concerns of which governors and legislators as well as educators are actively concerned. This report is intended to help these individuals as they address these policy concerns. It is based on the notion that policymakers can profit from learning experiences of other states.

This overview has three parts. The first summarizes the characteristics of the school finance reforms passed in the 1970s. Part two discusses the status of the states in 1977 on a variety of school finance equity goals. This is the first time a school finance equity assessment has been presented for all states. The final part reviews major events in 1980 and likely state legislative activities in 1981.

School Finance Reforms in the Seventies

Six major themes characterize the numerous and divergent school finance reforms enacted during the past decade:

Expanded General Aid

General operating equalization aid programs have been broadened and strengthened. Districts low in property wealth per pupil have usually become eligible for much more state aid than districts richer in property wealth per pupil. This has usually happened by "leveling up" less wealthy or lower spending districts rather than by redistributing funds from rich to poor districts. Recapture provisions that redistribute funds, however, have been adopted in some states, namely, Utah, Montana and Minnesota, although in Minnesota the recaptured amounts are deducted from state categorical funds.

Three types of specific formulas have been used in the efforts to enhance equalization goals (Callahan and Wilken, 1976; Odden, 1978;

Augenblick, 1979). Some states have enacted higher level foundation programs. Under these finance plans, the state guarantees a minimum level of per pupil revenues. Each local district may supplement that foundation amount. The amount of supplementation is often restricted by state law Arizona, California, Florida, Illinois, Indiana, Iowa, Massachusetts, Minnesota, New Mexico, North Dakota, South Carolina, Tennessee and Washingon have taken this approach. Washington is unique because the state fully funds its basic education program.

Other states have enacted formulas designed to reward equal local effort with equal revenues per pupil, these plans have been called district power equalization, guaranteed tax base, guaranteed yield, resource equalizer or percentage equalizing. Under this type of system, Colorado, Connecticut, Kansas, Michigan, New Jersey, Ohio and Wisconsin allocate state aid to local school districts in response to levels of expenditures chosen by the local district. It should be noted that in some of these states, there is a great deal of control over annual changes in school district budget levels.

Several states have added power equalizing components on top of higher level foundation programs so that above the foundation expenditure level, districts are guaranteed similar revenues per pupil at similar tax rates. Maine, Missouri, Montana, South Dakota, Texas and Utah have enacted this type of two-tiered equalization formula.

As a result of strengthening general aid formulas, state funding has consistently risen. In nearly every state that has enacted a school finance reform, the state not only increased the total dollars that it allocated for elementary/secondary education, but also increased the percent of public school revenues coming from state sources. School finance reform has brought forth increased state support of public schools.

Increased Equity

School finance reforms have increased the equity of state school finance structures. Irrespective of the method chosen, school finance reforms have reduced expenditure per pupil disparities per se, and have been even more effective in diminishing the link between expenditures per pupil and local school district property wealth (see Section III, Part 1). While there had been concern that power equalization types of programs might accomplish the latter but not the former goal, the overall results indicate that progress on both fronts has been made in states that have implemented school finance reforms. In part, this has resulted from the interaction between tax or expenditure limitations and school finance mecha-

nisms. It also appears that school finance reform states have made significantly greater advances in improving the equity of their school financing systems than have states that have not passed school finance reforms (Berne and Stiefel, June 1979).

Expanded Measures of Fiscal Capacity

New methods have been developed to expand the measure of fiscal capacity of local school districts beyond just property wealth per pupil. Connecticut, Kansas, Maryland, Missouri, Pennsylvania, Rhode Island, and Virginia all use a combination of property wealth and income in their school aid formulas. These expansions of the measurement of school district fiscal capacity have been supported by research findings in a number of states that show that property wealth, the composition of property wealth in terms of residential and nonresidential (commercial, industrial, etc.) property and household income each have separate and independent impacts on school district spending decisions (Adams, January 1980; and see Section III, Part 2).

Policymakers in many states are examining the potential of broadening fiscal capacity measures. Income is likely to be a more important factor as states and school districts seek new sources of revenue for education. A number of states currently return a portion of state collected income taxes to school districts in proportion to amounts collected. In this case, the use of an income factor or a system of directly deducting such revenues from state school aid can improve the equity of education support.

Special Pupil Needs

The states have dramatically expanded their role in providing high cost programs for various special pupil populations. They have expanded the number of programs they support and have increased the level of support for such programs, Today, all states have comprehensive programs for providing services to students with physical or mental handicaps; these programs are buttressed by the federal Education for All Handicapped Children law, P.L.94-142, which requires all students to have a free and appropriate education program provided. At the close of the 1970s, the states were serving 3.9 million handicapped students and spending more than $3.7 billion for those services; the federal government provided $1 billion for services to the handicapped. Also, 16 states had categorical programs of compensatory education serving 1.9 million students at a total cost of $647 million. Another 8 states had weightings to reflect the additional cost of providing compensatory education in their general aid formulas. These programs supplement the federal ESEA

Title I program funded at the $3.1 billion level. Finally, at the start of the 1980s, 22 states had programs of bilingual or bilingual/bicultural education serving nearly 660,000 students at a total cost to the states of $94 million (Odden and McGuire, May 1980).

Special District Needs

Additional formula adjustments and factors have been designed to assist school systems with particular district related characteristics. Additional state aid has been allocated for sparsely populated districts, districts with one room rural schools, districts with a very small pupil population, low wealth districts with very high tax rates, urban districts with "municipal overburdening" conditions, districts facing relatively high prices for educational resources, and districts with declining enrollments. Michigan, for example, allocates additional state aid to school districts in which the noneducation tax rate exceeds the statewide average by more than 25 percent. New York State is investigating the impact of municipal overburden since it was a specific issue raised in the *Levittown* court suit. Florida uses a cost-of-living index to adjust state aid distributions to local school districts. Utah, New Mexico, Kansas, Colorado Maine, Montana, Nebraska, Texas and other states have a variety of mechanisms that recognize small numbers of students, sparse populations or rural isolation (McGuire, Augenblick and Hammond, 1980).

Tax and Spending Limitations

Tax and spending limitations have been incorporated directly into new school finance formulas or into revised rules and regulations in nearly two-thirds of the states. While most of these limitation measures have emergency clauses or other mechanisms that permit some discretion in the application of strict limitations, most school districts in the country nevertheless have constraints on their ability to increase expenditures, budgets or property tax rates.

Some states, such as California with Proposition 13 and the Gann spending limitation, Idaho with the impact of Proposition 1 on local property taxes, Colorado and New Jersey with caps on state expenditure increases, and Arizona, Michigan and Tennessee with increases in state spending limited to changes in personal income, will experience severe fiscal pressures if the high inflation at the beginning of the 1980s continues. Massachusetts is likely to face similar pressures following the passage of "Proposition 2½" in November 1980. For states that have indexed their income tax structure, the impact on the state revenue picture is likely to be felt strongly in the next two years; California, Colorado and Minnesota are states to

watch closely in that regard. While in the extreme, these tax or expenditure limitations can have devastating effects on educational programs, they have contributed, in their less extreme forms, to improving the equity of school finance systems.

The continuing pressure to reduce the reliance of school districts on property taxation is likely to lead to the need for new sources of revenue for school districts. Already many states are exploring the possibility of expanding the tax base for school districts. This movement raises questions about the intergovernmental fiscal arrangements of tax collection and revenue distribution that exist today. The future condition of education finance will no doubt be improved as we better understand the entire intergovernmental system by which public services are provided in this country.

*School Finance Litigation**

In the courts, school finance litigation continues in many states and on numerous fronts. The 1973 U.S. Supreme Court decision in the *Rodriguez* case did not slow the pace of litigation as had been feared. Since that time, state supreme courts in California, Connecticut, New Jersey, Washington and Wyoming have ruled their state systems of school finance unconstitutional on the basis of state equal protection and state education clauses, although the highest courts in Idaho, Ohio and Oregon upheld their state structures. Trial court decisions finding financing systems in violation of the state constitution are on appeal in Colorado and New York. School finance cases are being tried in Arkansas, Maryland and Wisconsin. And school finance cases have been filed and are pending in Georgia, Massachusetts, Oklahoma, South Dakota and West Virginia. In short, school finance litigation is alive and much more diversified than it was a decade ago.

Since the original *Serrano* case was brought in California, both the legal theories used in the litigation and the scope of the cases have broadened:

> First, most cases are brought on the basis of either *state equal protection* or *state education clauses*. The California, Colorado, Connecticut, Ohio and New York cases are examples of the former, while the cases in Colorado, New Jersey, New York, Ohio and Washington are examples of the latter. Interestingly, both the Colorado and New York cases presented arguments, upheld by the trial court, on the basis of the federal equal protection clause as well.

*See Chapter II of *School Finance Reform in the States, 1979* (Augenblick, 1979), for an extensive analysis of school finance litigation written by Betsy Levin, now general counsel, Education Department.

Second, the *negative standard* that undergirded the simple *fiscal neutrality* theory, which held that education expenditures could not be related to local school district property wealth, *has been expanded* Litigants now argue that education expenditures can be related neither to property wealth, nor to household income, municipal overburden, education overburden nor local whim, i.e , votes of local citizens to keep tax rates low

Third, *positive standards have now been developed* and used successfully, these require the education finance system to consider education need and/or to implement some affirmative duty of the state One aspect of the California decision seems to require approximately equal resources per pupil, the New Jersey decision appears to require a minimal level of education attainment, the Washington decision requires the state to provide a minimum but "ample" level of school resources, the New York decision requires resources appropriate to the needs and costs of special pupil populations, and the Ohio and the New York State trial court decisions explicitly recognize the need for the state to adjust for the varying purchasing power of the education dollar among school districts. The challenge of the 1980s is to define the legitimate differences that may exist among school districts, to translate those differences into allowable expenditure variations, and create state aid systems that are sensitive to such variations.

The *Levittown* case in New York State serves as an example of the evolution of school finance litigation in terms of the comprehensive nature of the set of school finance issues included in the cases that are pending as the 1980s begin. *Levittown* is based on the state equal protection clause, the state education clause, and also the federal equal protection clause. It includes both the standard *Serrano* fiscal neutrality argument that expenditures per pupil should not be a function of local property wealth. But it also includes the issues of: (1) special pupil populations and the necessity for the finance system to be sensitive to pupil needs; (2) cost variation and the rationale for the formula to adjust for the varying purchasing power of the education dollar across school districts and regions; (3) the interaction between municipal finance and school finance and the potential need for the school aid system to adjust for the negative impact on education of extraordinarily high needs for noneducation expenditures; and (4) attendance overburden, i.e., the fact that the use of an attendance-based pupil count disadvantages districts with low attendance to membership ratios, a problem primarily out of the control of local school officials. Cases such as *Levittown* are beginning to define what can be considered legitimate variations among school districts rather than relying simply on the equal expenditure standard. *Levittown* is also one of what has become a number of cases raised specifically to test the state education finance role in regard to cities. Cases in Maryland and Wisconsin have emerged out of major cities and there has been discussion of similar cases being brought in New Jersey and Connecticut.

How litigation in school finance and education policy might evolve during the 1980s is difficult to predict. But the fact remains that legal action related to education financing has increased rather than decreased and broadened rather than narrowed. These trends are likely to continue during this decade.

School Finance Equity: The Status of the States, 1977

Improving the equity of the funding structures for education has been the target of school finance reforms of the past 10 years. But equity has a variety of meanings and, in fact, there have been many equity objectives of the numerous school finance reform laws that were passed in the 1970s. This section presents some new information about the status of the states using a number of different equity goals for the 1977 school year, the most current year for which data from all districts in each state are available. Before presenting those data, a brief review of different equity objectives is given. (See Odden, Berne and Stiefel, 1980, for a comprehensive discussion of equity definitions and their statistical measures.)

Equity for Children

Children are a primary group for which equity has been provided by school finance reforms. Three general equity principles for children have guided these reforms: (1) equal treatment for all; (2) equal treatment of equals; and (3) equal opportunity.

Equal treatment of all. A prominent source of inequity in most school finance structures has been large expenditure per pupil differences among school districts within a state. Differences of two- or three-to-one are common, and in many states differences between the high and low spending districts can reach a ten-to-one ratio. Even after adjusting the expenditure figures for factors that cause legitimate differences — such as pupil need differences, price variations, transportation costs and capital outlay expenditures — wide expenditure per pupil variations still have been found to exist.

One goal, either explicit or implicit, of most new school finance systems has been to reduce differences in expenditures per pupil. Numerous statistics can be used to measure the degree of expenditure disparity. Two — the coefficient of variation and the Gini index — are used to assess the equity of the states. The coefficient of variation, technically, is the standard deviation divided by the mean; it gives the percentage variation in expenditures per pupil about the average. The Gini index indicates the degree of variation from perfect equality. For both statistics, values close to zero indicate equality, and values closer to one indicate inequality.

Equal treatment of equals. States have recognized, though, that students and school districts are different and that such differences should be recognized in school aid programs Special student populations have been a particular target of the school finance reforms of the 1970s. The states have rapidly expanded programs providing extra funds for services to handicapped students, low income students, low achieving students and students with limited English proficiency.

Again there are a variety of ways to assess the degree to which states are treating students with special needs equitably One method is to weight students by a factor indicating the magnitude of additional resources needed, as compared to a standard student, and then conduct an equality analysis based on the number of weighted students. Another is to separate out all resources for special needs and conduct the equality analysis on the base resources available for all students and examine the special funds separately. A third method would be to analyze expenditure per pupil differences across categories of pupils with different special needs. Unfortunately, current data do not allow for an analysis of the issue of different pupil needs.

Equal opportunity In addition to recognizing differences among students that require appropriate unequal treatment, recent school finance reforms also have sought to reduce the role of factors that should not be related to spending differences. In particular, new school aid programs have sought to eliminate the links between equal educational opportunity and local district wealth and income, i.e., to create "fiscally neutral" school finance structures. This was a major issue in many school finance court cases and as a result has been a major objective of many reform efforts. In general, all recent education finance changes have been designed to funnel increases in state aid to low wealth and/or low income school districts in an attempt to break the link between spending per pupil and the fiscal capacity of local school districts.

There are many ways to measure the degree to which expenditures per pupil are related to local property wealth per pupil. Two statistics are used in the discussion. The first is the simple correlation coefficient, which indicates whether a linear relationship exists between the two variables. This measures the *precision* of the relationship. A value closer to zero indicates a less precise relationship, a value closer to one indicates a more precise relationship. The second statistic is the simple wealth elasticity. This statistic shows the percentage increase in expenditures per pupil associated with a one percent increase in property wealth per pupil. This measures the *magnitude* of the relationship. An elasticity close to zero indi-

cates that school district expenditures do not change much with changes in wealth; a greater elasticity indicates that higher district expenditures tend to be found in higher wealth districts.

Taxpayer Equity

Children have not been the only targets of the school finance reform efforts. Taxpayers also have been of concern; indeed taxpayer concerns may have been preeminent since, in addition to the taxpayer equity goals, property tax relief was a major element in many education finance changes that were enacted into law.

Horizontal equity In its classical public finance sense, the objective of this principle is to assure that taxpayers with similar incomes have similar tax burdens. This concern has not been a central objective of school finance reform although the school finance objective of reducing property tax burden regressivity in a sense subsumes this issue. (See Phares, 1980, for information concerning state and local tax burdens by income class for states.)

In school finance circles, this principle has been broadened to the school district level. A central problem in school finance is that taxpayers in low wealth districts often spend less per pupil at a given tax rate than taxpayers in high wealth districts. Indeed, in many states, school districts in the same geographical area can have very different per pupil spending levels even with similar tax rates; many times the district with the higher tax rate spends less than a neighboring district with a lower tax rate.

In response to this type of taxpayer inequity, many states attemped to achieve the goal of providing what is known as "equal yield for equal effort." This goal is met when the state guarantees to taxpayers in each school district approximately the same amount of local and state revenues per pupil for equal tax rates, regardless of the level of local wealth or income. Colorado, Connecticut, Illinois, Kansas, Michigan, New Jersey, Ohio and Wisconsin are some states that have implemented this kind of school aid program.

Vertical equity. The objective of this principle is to assure appropriate treatment of people with different incomes. As complements to a new school finance distribution formula, some states also have sought to reduce the burden of the property tax on persons with low incomes. Michigan, Minnesota and Wisconsin implemented circuit-breaker programs of property tax relief, as complements to new school finance plans. The school finance plan improved the equity of the property tax on a district by district basis, while the circuit breaker program improved the equity of the property tax on an indi-

vidual household basis by limiting property tax payments as a percentage of income. In most cases, the percentage increased as income increased, the objective being to make the property tax a more progressive tax, at least with respect to current income.

The Status of the States in 1977

The data in Table 1 present statistical measures on two major school finance goals for nearly all states. These data are taken from unpublished tabulations from the National Center for Education Statistics (NCES), which is in the process of publishing a profile of all the states on a variety of education finance issues.* The information in Table 1 includes statistical measures of two major equity goals: expenditure per pupil equality, and fiscal or wealth neutrality, i.e., the degree to which expenditures per pupil and property wealth per pupil are related. As mentioned above, two statistics are given for each goal. the coefficient of variation and Gini index for the goal of expenditure per pupil equality, and the simple correlation coefficient and wealth elasticity for the goal of wealth neutrality. These data are used in the following maps to show the states ranking relatively high or low on these various equity goals.

*All data are from special NCES tabulations from the merged data file for all school districts for 1977 The expenditure disparity statistics were calculated using a core current expenditure per pupil. core current expenditures are defined as current operating expenditures from all revenue sources less transportation expenditures The wealth neutrality statistics were calculated from local property values (adjusted to a comparable base except in those states as noted) and total per pupil revenues from state and local sources In calculating all statistics each district value was weighted by the number of pupils in that district.

Table 1
Measures of Equity of State School Finance Systems, 1977

	Expenditure per Pupil Inequality		Wealth Neutrality	
	Coefficient of Variation (x 100)	Gini Index (x 1,000)	Correlation Coefficient	Simple Wealth Elasticity
Alabama*	12.2	6.8	0.58	0.18
Alaska	23 0	10.9	−0.06	−0.08
Arizona*	14 0	6.4	0.50	0 18
Arkansas	18.1	10.0	0.74	0.28
California	14.0	7.1	0.63	0 18
Colorado*	17.6	9.4	0.63	0.31
Connecticut	18.6	10.3	0.70	0.39
Delaware	22.6	11.7	0.57	0.37
Florida*	12 1	6.7	0,51	0 21
Georgia	19.4	10.8	0.38	0.22

*Local assessed valuation figures for property wealth; for all other states the assessed valuation figures are adjusted to a comparable base

Table 1 (continued)

	Coefficient of Variation (x100)	Gini Index (x1,000)	Correlation Coefficient	Simple Wealth Elasticity
Hawaii**	—	—	—	—
Idaho	14.7	7.7	0.42	0.14
Illinois	17.4	9.7	0.33	0.13
Indiana	15.7	8.8	0.69	0.28
Iowa	7.3	4.0	0.47	0.01
Kansas	14.4	7.4	0.73	0.23
Kentucky	21.0	11.1	0.81	0.28
Louisiana	12.0	6.8	−0.03	0.01
Maine	15.0	8.2	0.37	0.16
Maryland	14.7	8.0	0.60	0.18
Massachusetts	24.9	12.5	0.24	0.23
Michigan	20.5	[illegible]	0.67	0.26
Minnesota	18.6	9.9	0.13	0.19
Mississippi*	14.6	8.0	0.85	0.19
Missouri	23.4	12.2	0.75	0.32
Montana	N.A.	N.A.	N.A.	N.A.
Nebraska*	18.1	8.7	0.76	0.45
Nevada	7.5	2.0	0.92	0.25
New Hampshire	13.9	7.7	0.61	0.37
New Jersey*	15.1	8.4	0.55	0.19
New Mexico	13.2	5.9	0.32	0.07
New York	19.8	10.6	0.71	0.33
North Carolina*	12.1	6.6	0.50	0.18
North Dakota	16.2	8.3	0.24	0.12
Ohio	22.9	12.8	0.58	0.37
Oklahoma	17.2	7.9	0.80	0.19
Oregon*	11.4	6.4	0.38	0.17
Pennsylvania	20.9	11.7	0.65	0.28
Rhode Island	13.6	7.7	0.63	0.39
South Carolina*	13.6	7.4	0.60	0.41
South Dakota	18.0	9.1	0.68	0.36
Tennessee*	22.7	12.8	0.42	0.18
Texas	18.1	9.3	0.64	0.17
Utah*	9.7	4.7	0.78	0.05
Vermont	16.5	9.2	0.62	0.36
Virginia	24.3	12.7	0.72	0.43
Washington	18.4	10.2	0.40	0.20
West Virginia	9.7	5.5	0.63	0.21
Wisconsin	14.4	8.1	0.09	0.10
Wyoming*	15.0	8.1	0.81	0.20

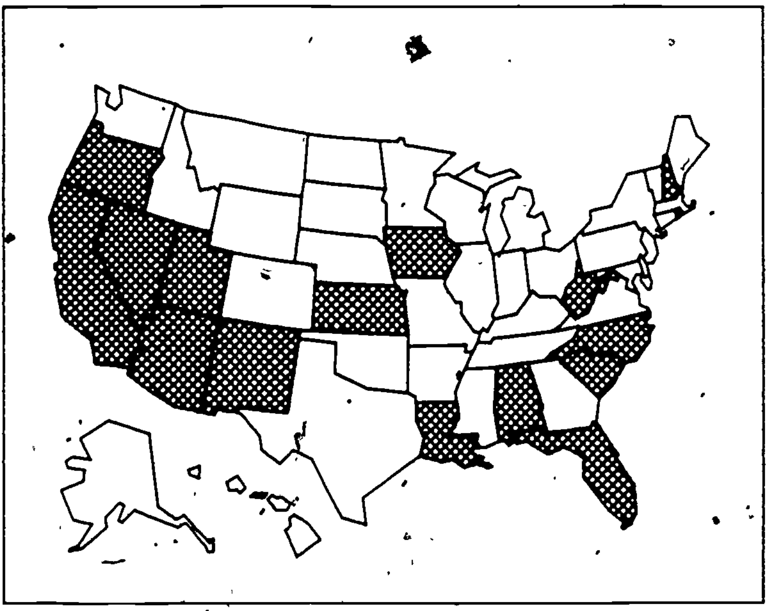
N.A. = Not available

*Local assessed valuation figures for property wealth, for all other states the assessed valuation figures are adjusted to a comparable base.

**One statewide school system

In Map 1, the shaded states are those that have the lowest relative expenditure disparities; that is, they ranked in the top third of the country for each measure of expenditure per pupil equality. The geographical pattern to these states is striking. Very few states in the industrial midwest and northeast are shaded; but nearly all states in the southwest are in this category, and many states in the southeast are also in this group. Interestingly, many of these are school finance reform states: Arizona, California, Florida, Iowa, Kansas, New Mexico, South Carolina and Utah. Except for Arizona and Kansas, all these reform states also have the common feature of a high level foundation programs as the basis of their school finance system.

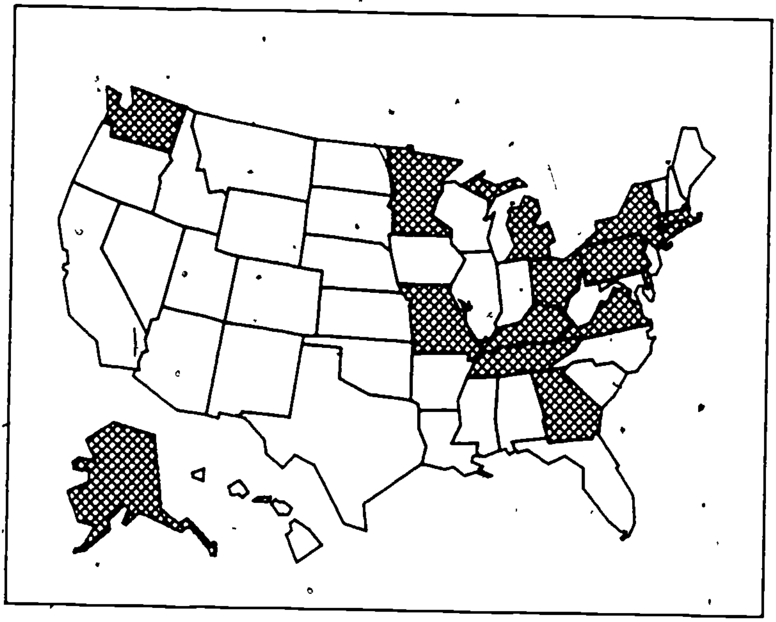
Map 1
States Ranking High on Expenditure Per Pupil Equality
Gini and Coefficient of Variation



United States, 1977

Map 2 shows the states that had the highest relative expenditure disparities, that is, they ranked in the bottom third for each measure of expenditure per pupil equality. The geographical distribution of these states reflects just the opposite of the previous map: most of the states with wide disparities in per pupil expenditures are in the midwest and northeast while none of the states in the southwest are in this category. School finance plans in these states are hard to characterize. Some, like Michigan, Missouri and Ohio have large guaranteed tax base elements and significant local leeway in their systems, which permits variations in expenditure per pupil levels. Others like Georgia, New York, Pennsylvania and Tennessee have low level foundation plans. But Minnesota and Washington have high level foundation types of school finance formulas, although in Washington the plan was only in its initial year of implementation in 1977. By 1980 one would expect Washington to be in the most equitable group since it is moving close to a full state assumption program. Also it is surprising to find Minnesota in this category; it was in the most equitable category in previous assessments of state school finance equity (Odden, Berne and Stiefel, 1979).

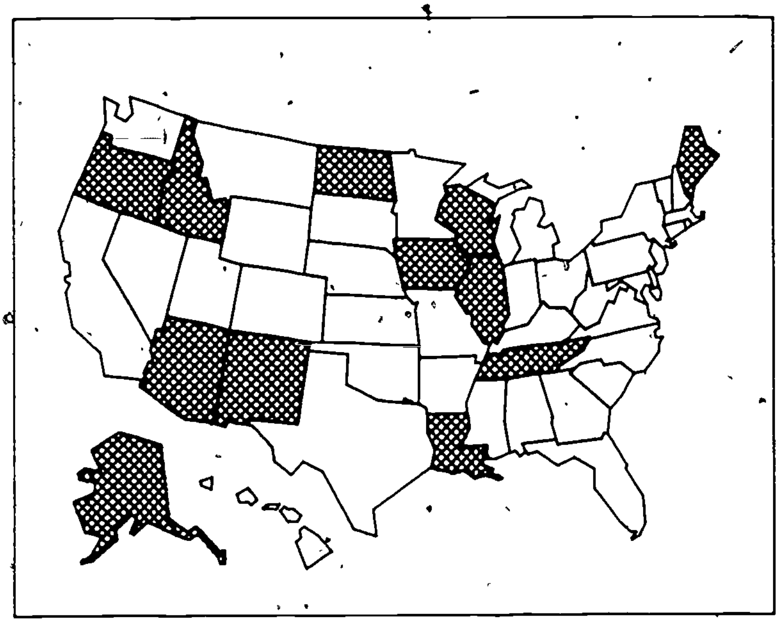
Map 2
States Ranking Low on Expenditure Per Pupil Equality
Gini and Coefficient of Variation



United States, 1977

For Map 3, districts that ranked in the top third for each measure of wealth neutrality are shaded These are the states with the lowest relationship between expenditures per pupil and local district property wealth per pupil. It is difficult to detect a geographical pattern to the results. Two states in this category — Maine and Wisconsin — have funding formulas specifically designed to accomplish this objective. Four states — Arizona, Iowa, Louisiana and New Mexico — rank high on both measures of wealth neutrality and on expenditure per pupil equality. Tennessee had a high level of expenditure per pupil disparity and also a high level wealth neutrality, which means that although expenditures varied they were not related to local property wealth per pupil. Only 12 of the 50 states ranked in the top third using these two measures of wealth neutrality.

Map 3
States Ranking High on Wealth Neutrality Correlation and Elasticity

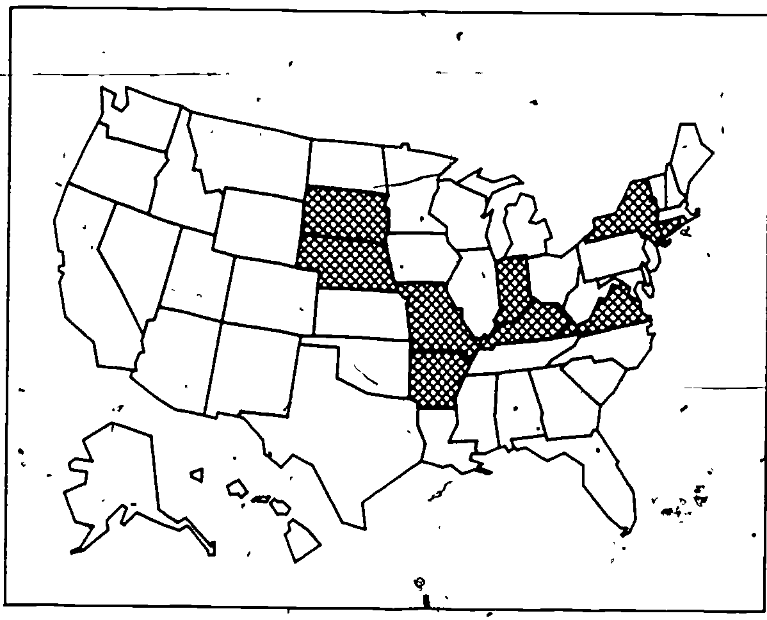


United States, 1977

The shaded states in Map 4 are those that ranked in the bottom third on each measure of wealth neutrality. That is, they were relatively low in the attainment of fiscal neutrality. There is a slight geographical pattern to the results: the shaded states tend to be in the middle and eastern part of the country, although the pattern is mixed. States not in this category are in the west and the southeast.

Those in the west, particularly the southwest, may not be in this category because they tend to be states with less expenditure per pupil variation; the same holds true for many of the southeastern states It will be interesting to watch the situation of Missouri over time. In 1977 Missouri passed a major school finance reform plan and has funded it substantially since then; it should improve on this equity goal. New York, on the other hand, has infused substantial amounts of new state aid into its system but without changing the relative distribution of aid in any fundamental way. It may not improve on this equity goal over time.

Map 4
States Ranking Low on Wealth Neutrality Correlation and Elasticity

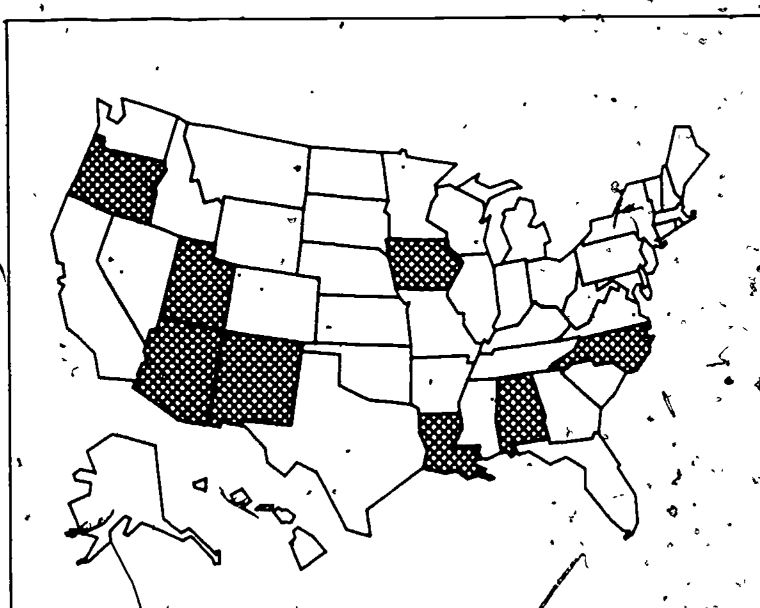


United States, 1977

In Map 5, states that are shaded were relatively the best in achieving the dual goals of expenditure per pupil equality and fiscal neutrality. These states ranked in the top third on all four measures used in this study. Only 8 of the 50 states can be classified in this way. Utah, New Mexico and Iowa are states that modified their school finance systems before 1977. The remaining states, however, did not explicitly change their school finance systems prior to that.

time; their success in meeting traditional school finance goals may reflect structural characteristics such as a relatively small number of school districts or a tradition that state aid is a high proportion of education revenues. In addition, the nature of the statistics is such that small variations can be important in ranking states but unimportant in an absolute sense.

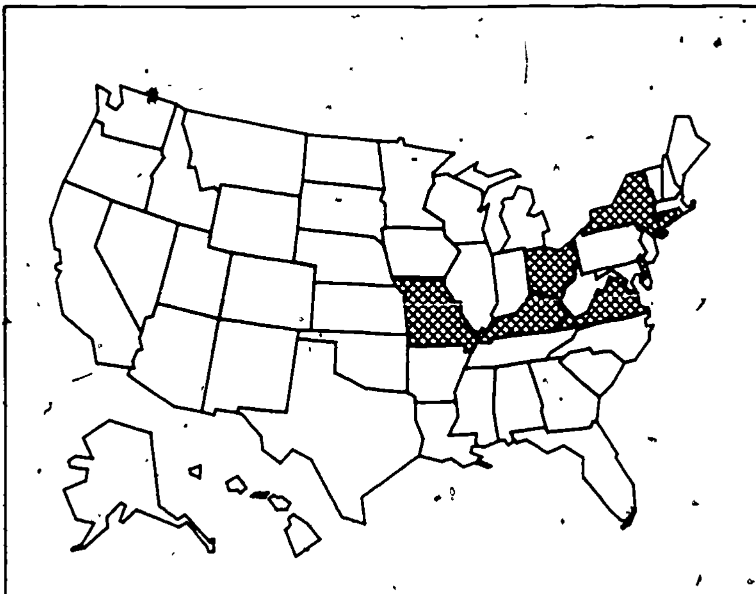
Map 5
States Ranking High on Both Expenditure Equality and Wealth Neutrality
Coefficient of Variation and Elasticity



United States, 1977

Curiously, only a very few states ranked low on both measures of expenditure equality and fiscal neutrality. Of the seven states in this category, as shown in Map 6, three states experienced recent school finance litigation (Ohio, New York and Connecticut) and two (Missouri and Virginia) modified their systems in the late 1970s. Delaware undertook a study of its school finance structure in 1979-80 and is reviewing plans to change its system.

Map 6
States Ranking Low on Both Expenditure Equality and Wealth Neutrality
Coefficient of Variation and Elasticity



United States, 1977

The ranking of states in regard to these equity goals is a useful activity because it enables policymakers to assess how well their systems are achieving objectives, particularly in relationship to other states. However, school finance activity of the 1970s showed that there are numerous goals that could be achieved, that more precision is needed in measuring achievement, and that, because of peculiarities in each state system, it is difficult to impose simplistic solutions on all states. This attempt to rank states has shown how difficult it is to generalize about the impacts of school finance reform. Despite the difficulties in undertaking this type of analysis, it can, combined with other information, lead to improvements in the equity of school finance systems in the states.

State Legislative Agenda for 1981 in the Fifty States

It appears that in 1981, school finance will continue to receive attention in state legislatures. In six states, studies have been completed during the last few months and legislative consideration of recommendations is expected. School finance will receive close scrutiny in nine states due to the impacts of tax or expenditure limitations or to state revenue problems caused by poor economic conditions. In 14 states, studies of the school finance system or an important aspect of it will be continuing through the coming legislative sessions with the possibility of modifications being discussed this year In the remaining 21 states, the school finance system will not be the object of major legislative attention although particular parts of the system are being studied.

States Where the Legislature May Consider Changes in the School Finance System

During the last year, study groups in six states have been reviewing their school finance systems. In almost all cases, these study groups have included legislative representation. While litigation was the primary factor that led to the initiation of studies in two states, in the remaining four states the legislature or the state board of education reviewed the school finance system on its own initiative. Interestingly, in two of these states, major changes in the school finance system had been made in the 1970s.

In 1979, the *Delaware* State Board of Education created the School Finance Study Committee to respond to the recommendations of a University of Delaware study of the schoool finance system completed with the aid of P.L. 93-380, sec. 842 funds, and to assure that any new system was compatible with the reorganization of the New Castle County School District, a newly-created district comprised of 11 previously independent districts. In 1981 the legislature will be scrutinizing the recommendation of the Committee, which include a proposal to equalize property assessments and a plan to incorporate locally-provided funds directly into the state aid system to promote greater fiscal equity. The proposed system requires local districts to share in the support of state-mandated teacher salaries through a foundation type program while permitting local districts to spend a limited amount above that level for which state aid would be available in proportion to foundation aid.

During an interim session of the *Kansas* legislature, it was concluded that a new school finance formula was needed to replace the reform approach developed in 1973. The plan that has emerged

would change the general aid formula but would not affect categorical programs. Under the proposed system, every district would have a basic budget level and state support would be provided after deducting local receipts from a uniform property tax levy, the amount of income tax revenue returned to districts by the state, and P.L. 874 revenues. While the state would permit annual increases of seven percent in basic budgets, districts would be able to exceed that limit through a school board vote. State aid would be provided for the basic budget and, after a one-year delay, for the amount that exceeds the basic budget.

During the last year, *Mississippi* has been examining the organization and financing of education through the Special Committee on School Finance and Administration. The state's Foundation Program, designed in 1953, has increased in magnitude while the local share of its funding has remained constant over time. The Committee has advocated the use of property valuation, rather than a multivariable economic index, once property assessments are equalized in 1983. The legislature will be reviewing simulations of the impacts of alternative state aid systems this year.

A School Finance Study Group appointed by the State Board of Education and including membership from the legislature studied the impacts of the 1977 *Missouri* school finance reform, a two-tiered system with an income factor, and reached the following conclusions. (1) the formula has had the intended impacts by reducing property wealth and income related expenditure per pupil disparities each year since 1977; (2) assessment-ratios used to adjust assessed valuations to a common level have improved and now are relatively accurate; (3) tax burden shifts from commercial industrial and utility properties to residential properties are likely to occur with reassessment of property; and (4) all district budgets have been squeezed by high inflation. The legislature will consider the Committee's recommendations to (1) increase the sales tax, the receipts from which are to be used both for a property tax rate rollback and for distribution to local school districts; (2) adopt a district cost-of-education index; and (3) use a three-year average pupil count for declining enrollment districts.

In 1978, *New York's* school finance system was declared unconstitutional by a lower court. While the case is on appeal to higher level courts in the state, a task force on school finance was established by the Governor and the State Board of Regents. In 1979 numerous research activities were undertaken by the task force to review the status and impacts of the school finance system. The task force has paid particular attention to the role of income and the composition of the property tax base, developed regional indices to

reflect education price variations, and reviewed the interaction between municipal finance and school finance to deal with questions raised in the litigation about "municipal overburden." In 1980 the task force examined numerous alternative finance systems using a computer-based simulation. Two interim reports have been issued by the task force and it is likely that the legislature will begin to grapple with the myriad issues and recommendations of the task force if the lower court's decision is upheld in a decision expected within six months.

In January 1980, *Wyoming's* school finance system was declared unconstitutional by the state's supreme court. The court gave the legislature until July 1983 to implement a new state aid system The legislature appointed a 10-member Select committee on School Finance, the members of which are all legislators, and an advisory panel of educators and lay members. Among other questions under discussion were whether minerals and other types of nonresidential property should be taxed by the state, whether the state aid system should include a recapture provision, whether mechanisms currently used to recognize the legitimate expenditures of sparse school districts should be modified, whether a cost-of-education index should be included in the state aid system, and whether a pupil-weighted approach should be used to reflect the costs associated with special educational programs. Given the court mandate, school finance is likely to be the major topic of debate in the two-month legislative session.

States Where Education Expenditures are Threatened by Revenue Problems

In a number of states, tax and expenditure limitations or the availability of state revenues have placed severe constraints on school districts. This is likely to raise questions about the school finance system, the level of state support for education, and the state/local taxation system. The states facing this problem are evenly split between ones that had undergone reform in the 1970s and ones that had not.

In *Alabama*, where state aid provides a high proportion of school revenues but where projections indicate a slowing of revenues to the state, the legislature will be examining methods to equitably shift a larger proportion of education spending to local school districts through an increase in property taxation.

This is the first year since passage of Proposition 13 that *California* is not projected to produce a large amount of surplus revenues. Local governments can no longer depend on state aid, distributed through

the post-Proposition 13 bailout mechanisms, to compensate for revenue losses associated with significantly-reduced property tax levies The major concern for most school districts is how to preserve current service levels in light of inflation and limited increases in state aid for education. Due to this fiscal dilemma, proposals have been discussed to shift some categorical funds to general aid, allowing for greater flexibility at the district level in the allocation of resources. The possibility exists that the *Serrano* case will be reopened Plaintiffs have petitioned the state supreme court to find California's current school funding system not in compliance with the 1976 *Serrano* judgment. The petition calls on the legislature to eliminate existing spending disparities among the state's school districts during the 1981 legislative session.

In 1978, Proposition 1, modeled on California's Proposition 13, passed in *Idaho*. Since Proposition 1 was statutory, however, the legislature was able to delay its impact. While the state has not had a revenue surplus to use in replacing lost local property tax receipts, it has cushioned the fiscal impacts by providing some additional state support at the expense of other state programs. The real impact of Proposition 1 will be felt in late 1981. The legislature will be examining the impacts of mandated property reappraisal and across-the-board reductions in budget increases.

Iowa has been forced to reduce all state support by 4.6 percent this year. Given the reduced availability of state aid and the growing need to provide more funds for vocational education, the legislature may review the school finance system in this session.

In *Kentucky*, state school officials foresee debate in the legislature over H.B. 44, enacted in 1976, which placed a ceiling on local property tax revenues. Specifically, this law limits increases in tax revenues to 4 percent each year making it difficult for local school district revenues to keep pace with inflation. Currently, the state's minimum foundation program does not compensate for these inflationary pressures.

Major tax reform is the issue that promises to have the most significant impact on school finance in *Massachusetts*. In November 1980, voters approved a tax limitation measure that limits the property tax to 2½ percent of assessed valuation (it has averaged almost 4 percent across the state). While the impact of this limitation will vary across school districts, some districts are expected to lose substantial revenues, particularly large urban districts. While state policymakers are satisfied with the present school funding formula, revised in 1978, the state's goal for funding elementary and secondary education is to share in 50 percent of the total costs. The latest

estimates suggest that nearly $450 million would be needed to meet this goal.

Michigan is facing the most severe decline in state revenues of the 50 states. The state has reduced aid for education by 11.4 percent by eliminating both special aid for districts with declining enrollments and all state support for capital outlay and by reducing funding for all other categorical programs to 70 percent of their 1979-80 levels While no changes are expected in the funding formula, the legislature will likely be examining the state's revenue generation system as well as all state aid systems.

The major school finance issue in *Ohio* for the ensuing biennium will be how to maintain the current level of school district education programs in the context of severe budget constraints State aid available to school districts was reduced by 3.6 percent for FY 81 and low revenue estimates have forced the state to enact temporary legislation that increases a series of state taxes in order to offset a projected budget deficit of nearly $500 million. A restructuring of the school aid formula might also occur during the biennium, since over two thirds of the state's school districts no longer receive aid according to its guaranteed yield program An issue of particular importance is new sources of revenue to local school districts beyond property taxation.

In *Oregon*, projections of state revenue for FY 81 are low. The legislature is likely to examine changes in the school aid formula to assure that revenue for schools is reduced in proportion to the loss projected for other state agencies. State support under the basic aid program is expected to be protected, while other state aids may be significantly reduced. A primary concern, however, is that the level of equalization achieved by the current system not be reduced.

States Where Studies of the School Finance System are Under Way or May Be Initiated

Eleven states are in the midst of studying their school finance systems or are anticipating major studies. An additional three states face the possibility of litigation that may require a legislative review of the school finance system. Some of these states are expected to "fine-tune" reforms enacted in the 1970s.

Arizona passed new school finance legislation in 1980 and will monitor its new system. The new school finance law will substantially increase the state's role in financing education while also reducing the reliance of local school districts on the property tax. The most significant feature of the new funding formula is that school

districts will now receive a block grant from the state for all categories of aid rather than separate aid amounts for specific education programs. While the calculation of the total amount of state aid will be made on a categorical basis, i.e., equalization, handicapped, bilingual and gifted, the individual amounts will be summed and allocated as a block grant. All current requirements for maintaining programs for the handicapped, bilingual and gifted student, moreover, will be maintained. State aid for capital construction has also been placed on an equalized basis. A part of the tax reform package that directly affects the new school finance legislation is an integrated system of property tax limitations intended to reduce the budget requirements of local governments in future years, leading to reductions in the property tax rates that these jurisdictions impose. This, in conjunction with the increased level of state support for education, should help to equalize the tax rates levied across school districts in the state.

South Carolina is in the third year of a five-year phase-in of its new school finance system. The legislature will be reviewing anticipated allocations and implementation procedures. It also will be analyzing the weights used to direct support to different categories of students. State aid for capital outlay will also be the subject of study.

In 1977 *South Dakota* passed a new school finance law that included a pupil weighted system as part of a foundation program with an equalized second tier. Implementation of the new law was put off until July 1982. A current task force that has studied the actual formula in comparison to the proposed formula will be recommending that the new formula be repealed but that its best features be added to the current formula, which provides for a foundation program based on classroom units (CRU) rather than pupil units.

Washington's school finance system, changed in 1977, will be the subject of legislative review this year. The primary target will be teacher salary schedules. Under the formula, the state provides aid for all basic education expenditures and districts are severely limited in the amounts they can provide beyond that level. However, because the state aid system is driven by numbers of teachers and their salary levels, variations among districts have persisted due to differences in local salary schedules. Since established guidelines have not proven effective, the legislature may consider the use of a statewide salary schedule or a system of limiting increases in locally set salary levels when salaries exceed the statewide median level.

Three issues are likely to receive attention during the 1981 legislative session in *Wisconsin*. Of primary concern will be the issue of increased funding under the general school aid formula. This will

undoubtedly be the subject of considerable debate since the state does not expect revenues to increase substantially over the previous fiscal year.

In both *Florida* and *Maryland*, studies are under way to determine relative price variations among school districts in order to permit the state to distribute aid in a way that is sensitive to such differentials It is unlikely that either state will consider statutory changes in 1981 but the groundwork for legislative action in 1982 will be laid.

Minnesota and *Oklahoma* are in the midst of broad studies of their school finance systems while *Nevada* is expected to initiate such a study this year. In Minnesota, a Governor's Task Force on Education and a senate initiated study are being completed. The senate study is analyzing the issue of program versus pupil based funding. The Governor's Task Force is dealing with a number of issues, including: (1) a cost-of-education index; (2) program versus student based funding; (3) the state/local funding mix and a possible need to increase the local role; and (4) the state role in funding teacher salaries, especially relative to a merit incentive. The creation of a standing legislative committee on school finance to insure a discussion of the relationship between education finance and tax policies is being discussed. In Oklahoma a legislative commission, the Citizens Commission on Education, began its study of school finance and the future of education in 1980; it will continue its work for the next year, after which its recommendations will be presented to the legislature. Legislation has been introduced in Nevada that would call on the Governor to appoint a blue ribbon study committee to assess the school finance formula with a special focus on the needs of small schools.

Indiana is considering providing additional state aid beyond foundation formula support. Under the current system, variations in revenues and district tax rates persist. The legislature would like to assure that additional support is distributed to districts most in need and a second tier power equalization system is being discussed.

In *Colorado, Connecticut* and *New Jersey*, school finance modifications made in the 1970s are likely to be reviewed by the legislature over the next two years. Colorado is awaiting the decision of its supreme court in the *Lujan* case. While no legislative action fundamentally altering the current formula is anticipated until a decision is reached, the court could issue its opinion in the next few months. Connecticut is considering the elimination of minimum aid provisions and increases in formula support levels. There is speculation that litigation will be initiated seeking more appropriate considera-

tion of the needs of urban school districts. There has been discussion of litigation in New Jersey also. In that state, the interaction between the new school finance system and the state's system of capping the expenditure increases of jurisdictions is receiving attention A joint Committee on the Public Schools has recently reported that although spending levels in low wealth school districts have risen substantially over the five-year period since the last school finance reform, the trend toward equalization in both per pupil expenditures and school property tax rates has almost stopped. It has been recommended that a slow-growth adjustment factor be incorporated into the existing formula to aid districts where property valuations are increasing at less than the state average growth rate.

States Where There Is Likely Not to Be Major Legislative Activity

In the remaining states, school finance is not expected to be a major issue. Nonetheless, some attention will be paid to aspects of the school finance system, including: (1) maintaining or increasing the level of state support; (2) improving teacher salary levels; (3) reducing pupil-teacher ratios; (4) providing support for the capital outlay expenditures of school districts; and (5) reviewing the status of nonpublic education. Following is a brief description of the issues in these states.

Alaska will be considering the level of aid needed to operate low incidence, high cost special education programs.

Arkansas is facing a slower economy and a possible decline in state revenues. No action is expected until the outcome of *Alma School District No. 30 et al v. Dupree* is known. This case, which was originally filed in 1977, is currently being tried.

In *Georgia*, the issue is teachers' salaries. A study of the current level has estimated that $150 million would be required to increase salary levels to adequate levels. A January 1981 lower court decision in *Thomas V. Stewart* declared the school finance system unconstitutional.

A state surplus exists in *Hawaii* and that state will face the envious task of using those funds. Likely recipients of increased funding in the education arena are special education and bilingual education.

Illinois modified the school finance structure last year, removing the "resource equalizer" component of its formula. This year, funding ~~levels will receive attention. It is likely that the Department of~~ Education will initiate a school finance study to examine the state's pupil weights, to consider the use of price indices, and to review the

adequacy of the system.

Louisiana is examining a reduction in pupil-teacher ratios and is seeking aid to fund a professional improvement program.

In *Maine* an issue is the organization of school districts. A number of communities in which schools are to be closed have discussed the possibility of removing themselves from larger school districts. The regional organization of secondary level vocational schools is also being scrutinized since many regions have had difficulty in obtaining voter approval of proposed budgets.

Montana is likely to be reviewing its foundation program, although with a new governor and a new chief state school officer, it is not clear what the major issues will be.

Categorical program funding will be receiving attention in *Nebraska* this year. It has been proposed that the funding of vocational education programs be incorporated into the foundation program and that the state provide aid for Indian schools.

New Hampshire is considering requiring kindergarten to be provided by local school districts. Education of the handicapped is also receiving attention.

New Mexico is satisfied with its pupil-weighted formula, although there is continuous study of the weights used in the formula. Of some concern is support for small schools and a need for more funds in light of projected population growth. Merit pay for teachers is a recurrent topic that has implications in terms of school finance.

A reduction in pupil-teacher ratios is being examined in *North Carolina*. Tuition tax credits may also be reviewed by the legislature.

A number of organizations supporting education formed a coalition in *North Dakota* and successfully supported a citizen initiative to provide a 6½ percent oil extraction tax. The revenue from this tax is earmarked primarily for tax relief and increased funding for schools. Forty-five percent of the money collected will go to a foundation program for school finance. The 1981 legislature will implement this law.

In *Pennsylvania* the major concern is reducing the reliance of local school districts on property tax revenues. A Governor's task force has recommended that property taxes be reduced to provide 50 percent of all locally-generated funds. To replace lost property taxes, it

has been proposed that local districts be authorized to tax personal income.

In *Texas*, teacher salaries will receive legislative attention. Increased funding of the second tier of the state aid formula has been proposed. Property tax relief continues to be of interest and redefining the required local tax effort under the Minimum Foundation Program will be reviewed.

State aid for capital outlay remains an important topic in *Utah* where population increases have pressured local districts to expand their physical plants.

In *Virginia* the legislature will be reviewing teacher salary levels. There may also be legislation concerning the registration of non-public schools.

West Virginia has been examining the equity of its school finance system. It is anticipated that the *Pauley v. Kelly* court case, originally brought in 1975, will be tried in 1981. That case hinges on the definition of a "thorough and efficient" education system, as required by the state education clause.

Changes in the school finance system are not expected in *Rhode Island, Tennessee* or *Vermont* this year.

II. Fiscal, Demographic and Public Opinion Trends

This section of the booklet reviews three general topics associated with school financing that are of concern to policymakers across the 50 states. Part one covers the general fiscal condition of public schools, noting especially the degree to which school funding is keeping pace with inflation. Part two summarizes changing public opinion on schools and taxes. The final part reviews in brief, demographic and enrollment trends.

School Finance: The Fiscal Condition, 1980

Schools did well financially in the 1970s. Although schools were hit by inflation and demands to provide additional services, the fiscal base undergirding public elementary and secondary schools grew substantially. In 1969, approximately $35 billion from local, state and federal sources were available for school purposes; by 1979 that had increased by $52 million to a total of $87 billion. In real terms, revenues for schools increased by 26 percent over this time period. In per pupil terms the fiscal progress was even greater. In 1969 current operating expenditures per pupil were $657; by 1979 that figure had grown to $1,798, a nominal percentage increase of nearly 175 percent, and a real percentage rise of nearly 40 percent. These figures indicate that the revenues available for public schools rose dramatically in the past decade (Odden and Augenblick, 1980, pp. 24-25).

Given this growth of the fiscal base for schools; the current national mood for curtailing growth of government at all levels; demands for increased government services for defense, energy, transportation and the elderly; and the continue pressure on both government and individual budgets caused by high inflation; it will be a difficult task for education to match the fiscal gains of the 1970s in the decade of the 1980s. Table 2 provides some information on the difficulty of this task in the first year of this decade. The second column in this table shows that total expenditures for public elementary and secondary schools are continuing to grow: in the 1980 school year, public education will spend about $6.2 billion more than in the 1979 school year.

But the information in columns 3 and 4 of this table show that expenditures for elementary and secondary schools are falling as a

percent of both the country's gross national product (GNP) and its total personal income. While the declines are not precipitous, the changes nevertheless show that a smaller proportion of the nation's total economic activity is being devoted to public schools. Although there are many potential reasons for this drop (some would argue

Table 2

Total Elementary/Secondary Public School Expenditures, Selected Years
(Amounts in Billions)

School Year Ending in:	Total Expenditures	Total Expenditures as Percent of: GNP***	Personal Income***
1969	$35.5*	3.80	4.7
1979	86.7*	3.72	4.6
1980	92.9**	3.68	4.5

*National Education Association, *Estimates of School Statistics, 1978-79* Washington, D.C. NEA, 1980, p. 21

**National Education Association, *Estimates of School Statistics, 1979-80* Washington, D.C. NEA, 1979, p. 20

***As of Second Quarter, seasonally adjusted, *Survey of Current Business*, July 1980

that declining enrollments should produce a drop), the point is that, compared to the 1970s when resources devoted to elementary and secondary education maintained a constant percent of GNP and personal income, in the first school year of the 1980s elementary/secondary education received a somewhat smaller share.

Table 3 shows another aspect of the fiscal decline for public elementary/secondary schools. These data show that indeed, as predicted by many, revenues for public schools *decreased* in real terms in 1980, as compared to 1979. While total funds for schools rose at all three levels of government, when the figures are compared to 1979 in real terms, i.e., adjusted for inflation, the resources made available for schools fell at all three levels of government. In dollar terms, school revenues rose $6.2 billion in nominal terms, but fell $4.5 billion in real terms. These figures mean that in the 1980 school year there were fewer real resources available to teach students attending public schools than in the preceding year.

This drop in real resources, moreover, cannot be rationalized on the basis of declining enrollments. On a per pupil basis, as shown in Table 4, a drop in real resources also occurred: Expenditures per pupil increased 9.3 percentage points in nominal terms, but dropped

Table 3
Sources of Revenue, Selected Years
(Amounts in Billions)

	School Year Ending:				
		1980		Change: 1979 to 1980	
Sources	1979	Nominal	Real*	Nominal	Real*
Local	$38.1	$39 9	$35.3	+$1.8	−$2.8
State	41 1	45 1	39.9	+ 4.0	− 1.2
Federal	8 2	8 7	7 7	+ 0 5	− 0 5
Total	$87 4	$93.7	$82.9	+$6.3	−$4.5
		Amount as a Percent of Total			
Local	43.6	42 5		− 1.1	
State	47.1	48.1		+ 1.0	
Federal	9 3	9.3		—	

*July 1979 CPI = 218.9; July 1980 CPI = 247.8; 1967 = Base Year.

Source: National Education Association, *Estimates of School Statistics, 1979-80* Washington, D.C NEA, 1980, p 19.

3.2 percent in real terms.* While the drop in real resources on a per pupil basis is somewhat less than the overall drop, perhaps reflecting the decline in the total number of students, in both instances the data are quite clear: in 1980 real resources for public elementary and secondary schools declined. Compared to the rise in educational resources in the 1970s of 25 percent on a total basis and 40 percent on a per pupil basis, this drop in real resources in the first school year of the 1980s is an ominous beginning for the decade.

The data at the bottom of Table 3, though, show that a different trend of the 1970s, related to the sources of revenues for schools, has continued into the 1980s. In the past decade, a substantial shift occurred in the sources of revenues for schools. While the federal percentage role remained about the same, the state financial role increased consistently and the local financial role decreased. In comparing data for 1980 to that of 1979 data, shifting in the sources of school revenues continues. State revenues increased from 47.1 percent in 1979 to 48.1 percent in 1980, while local revenues declined from 43.6 percent in 1979 to 42.5 percent in 1980; federal revenues, as a percent of total revenues, remained the same. Thus the shift away from regressive and unpopular local property taxes towards more progressive and more popular state sales and income taxes continues as the 1980s begin.

*It would be interesting to analyze the elements of expenditures per pupil both that increased in the 1970s and that now are decreasing in real terms. To what degree were fixed costs versus programs and services the expanding items last decade? What items will be reduced when real resources drop?

Table 4

Current Expenditures per Pupil

School Year Ending in:	Amount, Nominal	Amount, Real*	Percent Change from 1979 Nominal	Percent Change from 1979 Real
1969	$ 657	N.A.	N.A	N.A.
1979	1,831	$1,831	N.A.	N.A.
1980	2,002	1,772	+9.3	−3.2

N A = Not applicable

*July 1979 dollars

Source National Education Association, *Estimates of School Statistics, 1979-1980* Washington, D C NEA, 1980, p 22, *Estimates of School Statistics, 1978-79* Washington, D C, NEA, 1979, p 25

It probably would be unrealistic, though, to assume the state role will continue to rise throughout the 1980s while the local role declines. Indeed, there is evidence in many states, even those that enacted reforms, that the rise in the state role is slowing and that interest in increasing local sources of revenue is growing. The 1980s may see the state role in providing revenues for elementary and secondary schools hit the 50 percent level but it may not go much above that level.

Though overall financial resources for schools dropped between the 1979 and 1980 school year, the pupil-staff ratio also dropped slightly (Table 5) which means that in 1980 there were slightly more education personnel available to teach public school youngsters than in 1979. Thus, one could argue that, in people terms, real resources in the nation's schools may not have decreased in 1980, and may actually have risen. Indeed, as the data in Table 5 show, there has been a continual decline in the pupil-staff ratio since 1969 and this trend is maintained by the 1980 data. Even though the decline between 1979 and 1980 is slight, if one assumes that the remaining staff have more years of experience and that more experience leads to greater quality, the small decrease in staffing ratios might represent a greater increase in resources in people terms.

Nevertheless, all these data show that it is doubtful that the fiscal success story of the 1970s will be repeated in the early years of the 1980s. Compared to the previous decade, resources for public elementary and secondary schools represent a lesser percentage of GNP and personal income in 1980, there has been a decline in overall revenues for school in real terms, and even in per pupil terms expenditures have decreased in real dollars. Only with respect to pupil-staff ratios is the first school year in the 1980s about on par with the last school year in the 1970s.

Table 5

Students, Staff and Pupil-Staff Ratios

School Year Ending in	Pupils in Average Daily Membership	Total Instructional Staff	Pupil-Staff Ratio
1969	44,341,836	2,158,713	20 54
1979	41,988,127	1,496,896	16 82
1980	41,101,222	2,485,042	16.54
Change 79-80	−786,905	−11,854	−0 28

Source National Education Association, *Estimates of School Statistics, 1979-80* Washington, D C NEA, 1980, pp 11, 13

Public Opinion

As just discussed, schools did well fiscally in the previous decade but have begun the 1980s by losing ground. On the other hand, during the previous decade public opinion about schools consistently declined as did the number of students. As the 1980s begin, these declining trends seem to be tapering off; indeed, the quality of the nation's schools may be increasing in the public's eye and enrollments may begin to rise in another five years.

As shown in Table 6, the percentage of the public giving the schools a grading of A or B declined steadily throughout the previous decade. Those giving an A dropped from 18 percent in 1974 to just 8 percent in 1979, while those giving a B dropped from 30 percent in 1974 to just 26 percent in 1979. Literally hundreds of articles and reports were written in the last half of the 1970s on the precipitous drop in the public opinion of the nation's public elementary and secondary schools.

This public dissatisfaction with schools, though, was part of a drop in public opinion of nearly all the country's public and private institutions. The country experienced major social and economic changes in the 1970s, including both high inflation and unemployment. These changes strained the social structure of the nation and its institutions, including the schools. One objective of educators in the 1980s will be to restore public confidence in the country's schools.

The results from the May 1980 poll of public opinion about education indicate that this restoration may be starting. While only 8 percent of those polled graded the schools an A in 1979, the figure not only did not continue to drop in 1980 but also actually increased to 10 percent, above the level for both 1978 and 1979.

Table 6

U.S. Public Ratings of School Performance

Grade	Percent of Those Polled						
	1974	1975	1976	1977	1978	1979	1980
A	18	13	13	11	9	8	10
B	30	30	29	26	27	26	25
C	21	28	28	28	30	30	29
D	6	9	10	11	11	11	12
F	5	7	6	5	8	7	6

Source *Phi Delta Kappan*, September 1980

Furthermore, in combining the results for those giving either an A or B grade, 35 percent gave one or the other grade in 1980 compared to just 34 percent in the 1979 poll. While a one-year result does not indicate a long term trend, the latest results do show that the long term decline has halted and suggest that public opinion may be on the rise again. If, indeed, it will be difficult to maintain the real level of resources for schools in the 1980s, the task would be helped substantially by a public opinion that schools are doing an increasingly better job. This is particularly true in a period when the demographic characteristics of the country are changing. The proportion of voters or taxpayers with children is declining; it will be increasingly important for education to be supported by a public which will have less direct contact with the education enterprise.

Even though the trend in the 1970s was for schools to be held in lower and lower public esteem, other results of public opinion showed — and continue to show — that schools are one of the highest rated institutions in this country. Indeed, all institutions and government services lost some ground in the 1970s. Yet as the information in Table 7 shows, schools are still a highly rated institution. Public confidence in schools, as of May 1980, was exceeded only by that for churches. And the percentage of those with a "great deal" of confidence in schools was considerably greater than those with confidence in the courts or local governments. One irony of these results is that schools really are an entity of local government in this country. Yet the public opinion of the schools as an institution is greater than that of local government in general, and also above that for both state and federal governments.

Table 7

How Much Confidence Do You Have in These American Institutions to Serve the Public's Needs?

Percent of U.S. Public, May 1980

	Great Deal	Fair Amount	Very Little	None	Undecided
The Church	42	40	15	2	1
The Public Schools	28	46	20	3	3
The Courts	19	45	28	5	3
Local Government	19	51	23	4	3
State Government	17	52	24	4	3
National Government	14	47	31	5	3
Labor Unions	17	38	30	9	6
Big Business	13	42	36	5	4

Source. *Phi Delta Kappan, September 1980*, p 35

Moreover, when asked which budget functions should be curtailed the most severely if local budgets have to be trimmed, the public still places schools among the set of protected services along with police, fire and aid to the needy. Less than 3 percent of the public would cut these activities (Table 8). These nationwide results are consistent with polls conducted in individual states asking the same, or very nearly the same, question (Palaich, Kloss and Williams, 1980). Despite public opinion of schools in general and despite public revolt over the level of taxes, very few people favor cuts in the budgets of public schools, or for police, fire and sanitation services.

Table 8

Supposing the Budgets of Your State and Local Government Have to be Curtailed, Which of These Parts Would You Limit the Most Severely?

U.S. Public, May 1980

	Percent
Public Safety	
Fire, Police, Criminal Justice	2
Public Schools, K-12	3
Aid to the Needy	8
Streets and Highways	11
Tax Supported Colleges and Universities	23
Parks and Recreation	41
Don't Know	12

Source: Advisory Commission on Intergovernmental Relations, *1980 — Changing Public Attitudes on Government and Taxes*, Washington, D.C.: ACIR, 1980, p. 5.

If budgets must be trimmed significantly at the local level, however, it seems likely that the education budget would be affected. Even if expenditures were reduced to zero for recreation and parks, the function usually targeted as that to cut total budgets would drop only a slight amount since that function does not constitute a large portion of the budget. If cuts are necessary, the big budget items will have to be affected, including education.

In relating these opinions on services in general to the level of government which might provide the services, there has been some change over the past 10 years which has some implications for school financing (Table 9). When asked which level of government provides the "most for the money," public opinion has changed between 1972 and 1980. While the majority still select the federal government, the percentage has declined from 39 percent in 1972 to just 33 percent in 1980.

While the percentage of those selecting the local government has remained constant at about one quarter of the population, the percentage choosing the state government has consistently risen, from just 18 percent in 1972 to 22 percent in 1980. Since, as noted previously, it is the state from which the bulk of increased revenues for schools has come in the 1970s and likely will come in the 1980s, this increase in public opinion on the "money worthiness" of state government augers well. As the states continue to take a greater role in the provision of many functions in the 1980s it can be hoped that this high public opinion on the efficacy of state government services will persist.

Table 9

From Which Level of Government Do You Feel You Get the Most For Your Money — Federal, State or Local?

Percent of U.S. Public

	Federal	State	Local	Don't Know
May 1980	33	22	26	19
May 1975	38	20	25	17
March 1972	39	18	26	17

Source: Advisory Commission on Intergovernmental Relations, *1980 — Changing Public Attitudes on Government and Taxes*, Washington, D.C.: ACIR, 1980, p. 2.

The increase in the public opinion of the state role also may be assisted by the public's opinion about taxation as shown in Table 10. Over the years, state taxes have been considered the least fair by the *smallest* proportion of the U.S. public. On the other hand, federal taxes, which were considered quite fair in 1972, are considered the least fair by the largest portion — fully 36 percent — of those polled in 1980. This rise in disenchantment with federal taxes combined with the decline in those believing the federal government gives them the most services for the taxes paid, suggests that it will be difficult for federal services and tax resources to expand in the next decade as they have in the past decade. Given the increased demands for federal involvement in defense, energy, transportation and services for the elderly, this might imply that it will be extremely difficult to expand the federal role in education in the near future.

Table 10

Which Do You Think Is the Worst Tax — That Is, the Least Fair?

Percent of U.S. Public

	Federal Income Tax	State Income Tax	State Sales Tax	Local Property Tax	Don't Know
May 1980	36	10	19	25	10
May 1975	28	11	23	29	10
March 1972	19	13	13	45	11

Source Advisory Commission on Intergovernmental Relations, *1980 — Changing Public Attitudes on Government and Taxes*, Washington, D C : ACIR, 1980, p 1.

On the other hand, the popularity of state taxes, together with the dramatic decline in those considering the property tax the least fair tax (from 45 percent in 1972 to just 25 percent in 1980), provides some basis of optimism for the maintenance of a strong state and local role in financing public schools. As the local property tax has declined over the past 10 years as a fiscal resource for schools, the public opinion of the fairness of the tax has increased. And as the state financial role for schools has risen, the public's opinion of the fairness of state taxes has remained about constant, with very few people considering either state sales of income taxes the worst. Although public opinion clearly can change quickly, the shifts in the financial base for public elementary and secondary schools at least seems to be on a consistent track with public opinion on the equity of taxes and which level of government provides the most cost effective services.

Demographic Trends

The U.S. Census Bureau has not updated its 1977 projections that the school age population — those 5-17 year old — will decline at least until 1985 but will begin to rise by the end of the decade (see Odden and Augenblick, 1980 for a summary of the Census projections). Schools, however, must also look at the composition of these total figures. The Census figures show that there will be a steady increase in those at the younger end of this scale and a decrease of those at the older end. The same Census projections also indicate that the composition of school age children will tend to change slightly, with a higher proportion of that population being minority at the end of the decade.

These older Census Bureau projections of school age children are reflected in the most recent school enrollment projections of the National Center for Education Statistics (NCES) as shown in Table 11. The NCES projections show a decline in total school enrollments through 1985 and then a slight rise by the end of the decade. The composition of these changes, however, is more important than the averages themselves. Like the Census data, the NCES data indicate that elementary enrollments will be about constant until the middle of the decade but then will begin rising steadily so that grade K-8 enrollments in 1989 are projected to exceed the enrollment levels of 1980. On the other hand, grade 9-12 enrollments are projected to decline rapidly throughout the decade.

This composition of enrollment fluctuations has important implications for school planning and intradistrict resource allocation. As the proportion of those enrolled in elementary programs increases, the costs of providing all education services may rise since it is becoming more popular to target resources on younger students, particularly those in kindergarten and the first through third grades. The potential savings from decreased enrollment in traditionally higher cost secondary schools may, therefore, not become a reality. Further, to degree that schools become more involved in pre-K programs, resource needs also may expand.

One other potentially significant feature of the data in Table 11 is that the 1985 projections are lower than the 1985 projections published by NCES one year ago (Odden and Augenblick, 1980, p. 17). There has been some disagreement over the methodology used by both NCES and the Census Bureau on enrollment projections. Kirst and Garms (1980), for example, argue that total enrollments will drop throughout the decade. Clearly, as the decade unfolds the validity of the various projections will be determined. Two facts seem

Table 11

School Enrollments, Public and Nonpublic 1969, 1979, 1980, 1985 and 1980

(Numbers in Thousands)

	1969	1979*	1980*	1985*	1989*
All Schools					
K-8	36,797	31,422	30,989	30,248	33,093
9-12	14,322	15,235	14,807	13,500	12,300
Total	51,119	46,657	45,796	43,748	45,393
Public					
K-8	32,597	27,822	27,389	26,448	28,993
9-12	13,022	13,735	13,307	12,100	10,800
Total	45,619	41,557	40,696	38,548	39,793
Nonpublic					
K-8	4,200	3,600	3,600	3,800	4,100
9-12	1,300	1,500	1,500	1,400	1,500
Total	5,500	5,100	5,100	5,200	5,600

*Projections

Source National Center for Education Statistics. *The Condition of Education*, Washington. D C. U S Government Printing Office. 1980. p 56

clear: (1) that high school level enrollments will drop throughout the decade, and (2) that elementary enrollments will be relatively constant during the first half of the decade.

It should be noted that these are nationwide figures and that data for individual states likely will vary substantially. For example, Utah is anticipating major enrollment increases at all levels, very similar to the nationwide enrollment jumps in the 1960s. Similarly, many states in the industrial midwest and in the Northeast are projecting greater percentage declines than the national averages.

Another important component of these recent NCES projections is the enrollment level of nonpublic schools. As compared to previous projections which had nonpublic enrollments constant through 1985, the new figures show a rise in nonpublic enrollments that continues throughout the decade. Thus, NCES projects that nonpublic enrollments will represent an increasingly larger percentage of total school enrollments as the 1980s unfold. This fact is another reason why it will be difficult to maintain real resource levels in the public schools. An expanding private sector will tend, even to a small degree, to drain support and resources away from a declining public school sector.

The rise in private school enrollments, especially in its potential implications for support for public schools, is of even greater concern when the race and income characteristics of school enrollments are

Table 12

School Enrollments by Race and Family Income

Race	School Enrollments of 5-17 Year Olds 1970	(Percent)	1978*	(Percent)
White	43,002	(85.2)	37,983	(83.2)
Black	6,838	(13.5)	6,735	(14.7)
Hispanic	N.A.		2,875	(6.3)
Total	50,479		45,675	

Family Income	School Enrollments of 5-17 Year Olds 1970	(Percent)	1978*	(Percent)
Under $5,000	9,025	(17.7)	4,124	(8.7)
$5,000 - $9,999	19,225	(37.1)	7,657	(16.1)
$10,000 - $14,999	12,651	(24.3)	8,990	(18.9)
Over $15,000	7,010	(13.4)	22,780	(47.8)
$15,000 - $19,999	N.A.		8,003	(16.8)
$20,000 - $24,999	N.A.		6,538	(13.7)
Over $25,000	N.A.		8,239	(17.3)
Not Reported	3,893	(7.5)	4,038	(8.5)
Total	51,805		47,589	

*Projections

N.A. = Not applicable.

Source: For 1970 figures, U.S. Bureau of the Census, *School Enrollment — October 1970*, Series P-20, No. 222. Washington, D.C.: U.S. Government Printing Office, June 1971. For 1978 figures, U.S. Bureau of the Census, *School Enrollment — Social and Economic Characteristics of Students. October 1978* Series P-20, No. 346 Washington, D.C.: U.S. Government Printing Office, October 1979.

examined (Table 12). These data reflect a decade of change in the makeup of students attending school (see Odden and Augenblick, 1980, p. 18). Schools are increasingly composed of a greater percentage of minority and lower income students. The minority data are shown directly in Table 12. If the 1978 income figures were deflated to 1970 dollars, the results would show a sharp rise in the under $5,000 category and a drop in the over $15,000 category.

Jacobs (1980) has shown that this rising minority and low income characteristic of school enrollments is not the case for the private sector. Analyzing data from the 1978 school year as gathered in the Current Populations Survey, Jacobs shows that private school enrollments are 92 percent white, compared to 83 percent for all schools, and only 6 percent black, compared to 15 percent for all schools. She also shows that 50 percent of students in private schools are from families with incomes above $20,000 compared to just 36 percent for total school enrollments. Jacobs also shows that the minorities in the private sector are generally from middle and upper income categories.

In short, the private sector enrolls a higher percentage of nonminorities and a much higher percentage of the affluent, nonminority as well as minority. Students in the public schools are poorer and more often are members of minority groups. Again, when these figures are translated into likely support for maintaining the real resource level in public schools, the outlook is not optimistic.

4C

III. Reviews of Major Policy Issues

This chapter summarizes research findings that have been recently uncovered in the area of school finance and provides an overview of issues that are likely to be of particular interest to policymakers in the near future. The chapter concludes with a list of references that interested readers might examine if they want more information.

The Impacts of School Finance Reforms

During the past 10 years, half of the states modified their school finance systems. Toward the end of the 1970s, research was undertaken to analyze the impacts of those modifications in order to determine whether the objectives of these programs were being achieved. Numerous studies of individual states have been completed. Typically, these charted the progress of school finance systems over time; however, few studies have compared the states to one another. Those studies that did compare the states found that greater progress was made in reducing the relationship between school district expenditure levels and school district wealth than in reducing the disparity among districts in their expenditure levels. This may simply reflect the fact that in the early part of the 1970s a primary objective of policymakers was to deal with property tax related problems. Studies have also shown that school finance reform led to increased expenditures for education in general and most of the new funds were not used to increase teacher salary levels. Finally, school finance reform has directed funds to districts with special needs, such as large proportions of pupils in need of compensatory education.

Fiscal Capacity and Fiscal Response

Studies of fiscal response and fiscal capacity have a dual focus. First, they attempt to determine how districts change their levels of local taxation and total spending in response to state and federal aid. This helps policymakers more fully understand the total impact of a particular program. Second, they examine which economic factors influence a district's spending level. This helps policymakers develop more comprehensive measures of fiscal capacity. These studies rely on economic theory for the choice of factors to study as well as the type of statistical analysis to use.

The fiscal response of school districts has been studied in many states by different researchers. The major findings of these studies are surprisingly similar. The research indicates that only a portion of each dollar of state *general aid* goes to increased spending; districts use the remainder to provide tax relief. On the other hand, almost all state or federal *categorical aid* goes to increased spending, sometimes it even appears to stimulate additional local tax effort.

These studies have also established a set of economic factors that tend to be associated with higher district spending in all states studied. These factors are: the level of property value and household income and the relative proportion of nonresidential property located in the district.

The results of these studies have been applied in two areas. First, the information on response to state and federal aid has been used to more thoroughly evaluate the impact of alternative aid formulas. Second, the findings on property wealth and income have influenced policy on alternative measures of school district wealth.

Cost-of-Education Indices

In recent years, researchers have been particularly active in developing cost-of-education indices. These indices attempt to measure the difference from district to district in the cost of providing educational services. Studies in this area have highlighted the importance of understanding the difference between expenditures and costs. *Expenditure* refers to the total amount (or total amount per pupil) of a district's *dollar outlays*. *Costs* refer to the *price* of a given item in a district's budget. As a result, two districts with exactly the same level of expenditures may *not* be providing the same level of educational services. One district is probably facing higher costs, so its education dollar does not go as far as the education dollar in the other district.

A fully adequate cost-of-education adjustment would compensate for this difference in prices; it would translate dollars into resources. But researchers today do not unanimously agree on how to construct a fully adequate cost-of-education index (nonetheless, the adjustments probably work in the right direction). As a result, policymakers must face the question: is it better to employ a less than perfect adjustment or to do nothing at all to attempt to remedy this problem?

One simply measures differences in the cost of living among districts. Another measures differences in the cost of providing a certain quality of education program. A third attempts to determine

the cost of purchasing similar quality resources, such as teacher personnel. Each type of index involves different assumptions, different data and statistical analyses, and has different policy applications. Several statistical methods used to derive the indices have been debated by those studying such measures.

Most studies have focused on the third type of index. Common findings have emerged. For example, the cost of purchasing similar quality teachers tends to be higher in large sized, densely-populated school districts. Also, those districts with high concentrations of disadvantaged pupils face higher costs in attracting similar quality teachers. In general, urban school districts have relatively higher costs when measured by this index.

These indices have been considered in several states as an adjustment to state aid in order to equalize the purchasing power of school districts. Florida presently uses a cost-of-living index; however, the state has contracted for a study to develop and evaluate other types of cost-of-education adjusters.

State Aid for Special Needs

Most new school finance systems have attempted to consider the additional costs to school districts caused either by the needs of students enrolled in special programs or by special characteristics of school districts, such as their sparsity. This has led to the need to separate "legitimate" from "illegitimate" variations in the per pupil expenditures of districts. The legitimate portion of the actual expenditure disparity is related to the variation in the needs of the districts. The illegitimate portion of the disparity is related to the variation in the desire of districts to spend more.

Numerous systems have been developed to account for the costs of special programs. Many states have determined the excess costs associated with such programs and provided aid for some or all of the costs. A number of states have classified students by the programs in which they are enrolled and weighted the students, relative to a student in a standard program, based on the relative cost of the program. These pupil weighted systems have proven successful in assuring the distribution of adequate resources in an equitable manner. Research has, however, pointed to certain problems in using these approaches, including the incentive to misclassify pupils in programs for which state aid is high. This and other problems continue to receive attention, particularly in the light of federal categorical aid systems.

Capitalization

Numerous studies have examined the effect of differences in public services and tax rates on differences in housing value among communities. This process of translating fiscal differences into housing values is termed capitalization. A recent interest in this area of study is the impact of school finance reform on housing values via this capitalization process. The results of studies to date suggest that higher local education expenditures have a positive impact on the value of housing while higher tax rates have a negative impact. School finance reform, by distributing increased amounts of state equalization aid, affects these levels of expenditures and tax rates. A complicated set of interactions are induced, and capitalization can occur.

Several inferences for school finance reform are drawn from the existing studies. First, the inequity among taxpayers that is assumed to exist prior to reform may not be as large as suspected if the price of education services is viewed not only as property tax bills but also housing costs. Second, the cost of reform within a state may be significantly less than previously expected if capitalization takes place. Finally, school finance reform may induce windfall gains and losses to individual homeowners as a side effect.

Education Tax Burdens

Most studies of the burden of taxes used to finance local schools have only dealt with the property tax. There is no true consensus on its incidence, or what burden it places on low income versus high income households. Traditionally, its burden is viewed as regressive; that is, it takes a larger percentage of the income of low income households. This conclusion relies on a number of assumptions about ownership of property and the ability to shift taxes to nonowners. These assumptions have been challenged by more recent analysis of the burden of property taxes.

A broader question for tax burden analysis is what is the burden of the total amount of taxes used to finance schools? The extent of state involvement has increased substantially, so that currently close to 50 percent of school revenues come from state sources. These are primarily general sales tax and state income tax revenues. In terms of tax burden, state and local taxes have been shown to be regressive for families with incomes of less than $30,000, which includes 93.5 percent of all family units nationwide. The most important feature leading to regressivity is the absence of a state individual income tax. Features that improve equity, by lessening regressivity, are sales tax exemptions for food and low income property tax circuit breakers.

Future Issues

During the 1970s, the emphasis of school finance analysis was the adequacy and equity of education resources. As a result research was designed to answer questions about how to determine the resources needed by different pupils (as in the determination of pupil weights to reflect the costs of other than regular programs) and those needed by districts with different characteristics (as in the determination of cost-of-education indices). Research was also directed to defining and measuring equity and to determining the likely impact of school finance systems on school districts (as in the analysis of the fiscal response of districts). One of the most important topics discussed in the 1970s was how to measure the fiscal capacity of school districts. Research was designed to determine factors other than property wealth that contribute to some districts choosing to spend more than others. This body of research has contributed toward developing a more sophisticated and complex view of school finance. These complexities, in turn, have demanded further research on these topics.

Thus, many of these questions continue to receive attention in the 1980s; moreover, new questions have emerged. Much research in the next few years is likely to be focused on different topics, some of which have emerged from recent court cases and some of which are related to the changing economic and political climate. The overriding framework within which this research will be conducted is that of fiscal federalism. In the 1970s it was recognized that school finance was an important part of public finance. In the 1980s, the role of various levels of government in raising revenues in general and in supporting education in specific will receive a great deal of attention. Within this context a number of specific topics are likely to be the object of research:

- What is the relationship between municipal finance and school finance: should states consider any special characteristics of cities as they distribute aid for education to them?
- Can other characteristics of school districts that contribute to their legitimate needs for funds, such as size, be included in state aid formulas?
- How can states appropriately consider the fiscal impacts of declining enrollments in their state aid systems?
- Can the relationship between education resources and education accomplishments be specified so that funds can be used more efficiently?
- What would the likely impact of new finance mechanisms, such as tax credits or block grants, be on the provision of education services?

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Appendices

Appendix A

ESEA Title I Appropriations for Fiscal 1981[1]

(Dollars in Thousands)

State	LEAs	Handicapped	Neglected/ Delinquent	Migrant	Concentration Grants	Incentive Grants	State Administration	Total
Alabama	72,511	726	236	988	7,450	—	1,229	83,140
Alaska	5,636	1,922	86	—	750	—	225	8,619
Arizona	28,343	737	378	7,018	3,158	—	595	40,229
Arkansas	42,070	2,096	310	5,140	3,620	—	799	54,035
California	246,055	3,388	2,871	56,087	35,459	—	5,158	349,018
Colorado	26,187	2,531	282	3,036	1,368	—	501	33,905
Connecticut	26,653	1,933	669	2,337	3,070	—	520	35,182
Delaware	7,342	2,011	296	888	750	—	225	11,512
Florida	91,914	4,125	1,781	20,827	9,342	—	1,920	129,909
Georgia	80,512	1,415	918	2,494	6,734	—	1,381	93,454
Hawaii	11,028	729	49	—	1,341	—	225	13,372
Idaho	6,729	300	87	3,477	750	—	225	11,568
Illinois	124,325	19,476	1,129	1,890	14,738	—	2,423	163,981
Indiana	37,967	3,682	918	1,237	1,713	—	683	46,200
Iowa	26,835	795	431	232	750	—	436	29,429
Kansas	21,464	1,029	413	1,280	750	—	374	25,310
Kentucky	57,391	1,420	514	4,634	4,828	—	1,032	69,819
Louisiana	83,181	3,265	505	3,798	9,081	—	1,497	101,327
Maine	10,671	849	165	2,969	750	—	231	15,635
Maryland	49,461	3,309	741	1,170	4,988	—	895	60,564
Massachusetts	55,221	11,271	702	5,206	6,626	—	1,185	80,211

Michigan	118,896	8,938	1,891	6,474	12,739	—	2,234	151,172
Minnesota	41,533	800	480	2,131	1,532	—	697	47,173
Mississippi	70,006	746	324	3,625	7,657	—	1,235	83,593
Missouri	51,016	1,984	393	1,900	4,209	—	893	60,395
Montana	9,533	392	163	1,074	750	—	225	12,137
Nebraska	16,292	398	174	543	750	—	272	18,429
New Hampshire	4,624	832	107	—	750	—	225	6,538
New Jersey	75,302	6,201	941	3,199	7,691	—	1,400	94,734
New Mexico	23,351	367	241	2,989	1,982	—	434	29,364
New York	276,498	15,633	4,253	4,819	39,967	—	5,118	346,288
North Carolina	85,224	3,159	1,393	6,375	6,202	—	1,535	103,888
North Dakota	7,998	274	90	939	750	—	225	10,276
Ohio	7,971	8,017	1,518	2,143	7,154	—	1,602	26,963
Oklahoma	33,614	1,057	699	2,099	2,387	—	598	40,454
Oregon	25,414	3,365	943	5,557	1,019	—	544	36,842
Pennsylvania	131,213	11,580	1,577	2,644	11,864	—	2,383	161,281
Rhode Island	9,731	656	112	—	877	—	225	11,601
South Carolina	55,850	1,129	911	793	4,984	—	955	64,622
South Dakota	9,292	317	102	46	750	—	225	10,732
Tennessee	67,788	876	1,080	397	6,257	—	1,146	77,544
Texas	178,015	8,843	1,693	69,517	19,558	—	4,164	281,790
Utah	9,221	605	108	416	750	—	225	11,325
Vermont	5,032	1,421	76	291	750	—	225	7,795
Virginia	65,191	2,155	938	959	3,949	—	1,098	73,331
Washington	32,168	1,978	171	9,461	2,260	—	698	47,236
West Virginia	29,569	555	308	258	1,884	—	489	33,063
Wisconsin	48,938	2,700	814	1,470	2,390	—	815	55,127
Wyoming	3,843	604	95	430	750	—	225	5,947

Source: *HEW Programs Transferred to the Department of Education State Tables — 1981 Budget Requests* Department of Health, Education and Welfare: Office of Education January 1980.

[1]These estimates are based on 1979-80 distribution data. When updated data are obtained, these amounts will change. As of FY81, all programs are advance funded.

Appendix B

Federal Aid for Vocational and Handicapped Education Programs for Fiscal 1981[1]

(Dollars in Thousands)

State	Vocational[2] Education	Handicapped[3] Education
Alabama	10,637	16,790
Alaska	9,419	1,717
Arizona	5,935	10,874
Arkansas	5,883	8,959
California	46,062	80,985
Colorado	6,560	10,564
Connecticut	6,242	14,462
Delaware	1,299	2,740
Florida	19,366	29,783
Georgia	13,968	23,361
Hawaii	2,038	2,469
Idaho	2,365	4,170
Illinois	23,286	52,927
Indiana	13,266	22,194
Iowa	7,025	13,634
Kansas	5,561	8,737
Kentucky	9,618	14,816
Louisiana	11,487	21,446
Maine	3,037	5,578
Maryland	9,400	20,716
Massachusetts	13,481	31,121
Michigan	21,417	35,328
Minnesota	10,020	19,127
Mississippi	6,974	9,294
Missouri	12,198	23,583
Montana	2,114	2,949
Nebraska	3,902	7,525
Nevada	1,337	2,607
New Hampshire	2,146	2,309
New Jersey	14,369	35,441
New Mexico	3,644	4,587
New York	37,454	46,583
North Carolina	15,393	25,132
North Dakota	1,789	2,273
Ohio	25,903	43,626
Oklahoma	7,275	13,711
Oregon	5,634	9,083
Pennsylvania	27,307	42,112
Rhode Island	2,273	3,302
South Carolina	8,625	16,810
South Dakota	2,016	2,188
Tennessee	11,816	26,328
Texas	32,366	63,208
Utah	3,754	8,382
Vermont	1,377	2,424
Virginia	13,074	20,574
Washington	N.A.	N.A
West Virginia	4,770	7,435
Wisconsin	11,909	14,187
Wyoming	956	2,141

Source: *HEW Programs Transferred to the Department of Education State Tables — 1981 Budget Request* Department of Health, Education and Welfare Office of Education. January 1980.

[1]These estimates are based on 1979-80 distribution data. When updated data are obtained, these amounts will change. As of FY81, all programs are advance funded.

[2]Basic grants only

[3]Excludes preschool grants.