
This document contains the proceedings of presentations made by the Fiscal Issues, Policy and Education Finance Special Interest Group of the American Education Research Association (AERA). Ten articles focus on equitable funding systems for K-12 education and examine school financing in the following states: Florida, Illinois, New York, Pennsylvania, Texas, Virginia, California, Washington, and Michigan. Findings show that there is wide variance among states' responses to the challenges of increasing fiscal stress and changing student demographics. Following the foreword, the following articles are presented: (1) "Retrenchment and Restructuring in Florida" (J. Michael O'Loughlin and Joan L. Curcio); (2) "The Illinois Challenge" (Kathleen C. Westbrook); (3) "The State of New York School Finance: A Post Reform Perspective" (Faith E. Crampton); (4) "State of the State: Pennsylvania" (Maureen W. McClure); (5) "Under the Veil of Unconstitutionality: The State of School Finance in Texas" (Hoyt F. Watson and Hershel E. Strickland); (6) "The State of the States: Virginia" (Deborah Verstegen); (7) "Keeping Track: School Finance Litigation in Virginia" (Deborah A. Verstegen); (8) "Supplemental Grants in California School Finance: A New Trend" (Lorraine M. Garcy and Lawrence O. Picus); (9) "The Right Answer to the Wrong Question: The Current State of School Funding in Washington" (Neil D. Theobald); and (10) "Equity Measurement in School Finance—Michigan" (C. Philip Kearney and David M. Anderson). References accompany each article. (LMI)
STATE OF THE STATES '92: 
BRIDGING TROUBLED FINANCE WATERS

Proceedings of the Fiscal Issues, 
Policy, and Education Finance 
Special Interest Group 
of the 
American Education Research Association

Annual Meeting 
1992 San Francisco, California

Kathleen C. Westbrook, Ph.D. 
1992 Program Chair and Editor
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proceedings.

Kathleen C. Westbrook, Ph.D.
1992 Program Chair and Editor
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FORWARD

This is document is a landmark in the history of the Fiscal Issues, Policy and Education Finance Special Interest Group of A.E.R.A. It is the first time in our history that a proceedings of presentations has been collated and presented. The work of our membership is always interesting and unique. The benefits of our collective expertise in the operation and development of funding systems in our respective states is an ongoing and ever present agenda. The development of this monograph is a testimony to the continuing commitment each of us has to the development of equitable funding systems for K12 education.

As readers will see as they peruse and contemplate the various papers from this 1992 conference at AERA - school financing in many of our states is in a state of transition. The reform efforts and work of policy makers at state and local levels is often predicated on historic patterns of hierarchical administration. Yet reform efforts are moving us toward increasingly more participative paradigms. Efforts to reform funding systems based on these historic models continues to frustrate local and state policy makers. Examples include efforts at constitutional amendments, changes in categorical support, and taxpayer equity issues. All of which sum up to stresses upon existing state resource bases. Little inside this monograph will point to revolutionary processes. Yet, the beginnings of new and emerging recognition of a changing milieu are beginning to appear. The issues of
increased demands for accountability and public participation are evident in several of the states. State fiscal demands in a period of time marked by increased taxpayer resistance to the historic reliance on local property taxation are evident. Readers will also notice a wide variance in the responses by individual states. Some states are experiencing increased fiscal stress and burgeoning enrollments while others are coping with out-migrations and geographical differentiation in costs of education and economic base deterioration. At the same time all states are recognizing the sweeping changes occurring in the student base that they serve. Students entering today’s public schools are, more than ever before, coming from homes that are socially and/or economically disadvantaged, and require more resource inputs from the educational systems in order to provide basic educational programs. The cohort of existing teachers and administrators are aging and reaching retirement ages. The impact on the quality as well as the delivery of K12 education in the next decade will reflect how well we, in the finance community, are able to predict and respond at the policy and implementation level.

The papers contained within this monograph provide no solutions. There are no simple or easy answers to the questions raised within these papers. What they do point out, however, is that the commitment of the individuals working in the school finance area are acutely aware of the changing issues facing K12 education as we move closer toward the turn of the next century. The U.S. population is shifting. From the largest population to partake of public education we are becoming the largest to participate in health care and leisure time at the same time the school age population is shifting to a largely non-English speaking and economically disadvantaged one. Can we meet this challenge? From the
work of the authors included here it is clear we have the expertise and potential. What remains to be seen is if we have the energy and political will to carry it forward.

It has been a pleasure and honor to serve as the first monograph editor for the Fiscal Issues, Policy, and Education Finance Special Interest Group. It is my sincere belief that the publication of these proceedings is the beginning of bringing our work, studies, and recommendations to a much wider audience of policy makers in all the states. I would encourage readers to contact the individual authors if they are interested in learning more about the progress and development of issues and agendas identified in these papers. I would also encourage your comments and reflections as a way of producing future documents which will be of assistance as you, and your states, develop and plan for revised or newly conceived funding mechanisms. It is only through continued communication, collaboration, and discourse that we will provide the best educational systems for the children who attend our public schools.

Kathleen C. Westbrook, Ph.D.
Editor
Two legislative situations affecting Florida schools raced towards each other on a collision course in the spring of 1992, as educators watched for the impending doom. The first situation, representative of legislative retrenchment brought on by recession-induced budgetary woes, involved the failure of the Florida Legislature to pass a state budget during the year’s regular session, the one constitutional duty that they were required to discharge. The second situation, representative of Florida's efforts to be on the forefront of educational change, was a commitment to restructuring schools to be more accountable for educational outcomes through the Educational Accountability Act of 1991, and subsequent budget appropriations.

The plight in which the state and therefore its educational system found themselves in the spring of 1992 began during the 1990-91 school year. The 1991 Florida Legislature, meeting during March and April in keeping with past practice, delivered an education budget in the closing hours of the legislative session. It linked appropriations for the 1991-92 school year in part, to the Accountability Act. Unfortunately, the recession which had arrived in Florida during the 1990-91 school year to a state ill-prepared to deal with it, and which had caused a shortfall in state revenues that year, continued unabated. The
appropriations for the 1991-92 school year, as those for the year before, could not be supported, and a succession of budget cuts were implemented by the Governor.

An analysis of the ongoing impact on Florida’s schools from the recession that whacked Florida’s economy in 1990, the consequent revenue shortfall, and subsequent legislative budgetary action (or lack of), particularly when pitted against concurrent mandates to decentralize schools and increase educational accountability, follows.

Policy Issues Arising Out of Budgetary Crises

The national economic recession that found its way to Florida during the 1990 school year is one of three forces that have come together to render Florida’s system of public education virtually indigent. First, Florida has but a single significant source of tax revenue with which to fund the infrastructure needs of the state, i.e., education, health, social services, prisons, transportation. The state constitution prohibits a tax on individual income (Florida Constitution of 1968). Lacking a state income tax, the general revenue necessary to support the governmental enterprise is generated almost entirely from a 6% state retail sales tax. Other than the sales tax, there are no other substantial sources of general revenue. Although Florida does have a state lottery with a share of the proceeds earmarked for public education, it does not represent a significant source of revenue after the cost of administration and prizes have been deducted from gross revenue.
The second force contributing to the impoverishment of Florida’s schools is the size of their student membership, one of the fastest-growing and largest of any of the states. Only California, Texas, and New York have larger student memberships than Florida’s (National Center of Educational Statistics, 1990), which is also distributed among 67 fiscally-independent school districts. During the 1990-91 school year, the number of K-12 students attending the public school of the state was 2,043,233 full time equivalents (F^T^E, Division of Public Schools, 1989). That number represented an increase of nearly 88,000 students from the previous year (Division of Public Schools, 1989). Weighted full-time equivalent students (WFTE) came to 2,301,910 after the various program costs were factored. The following school year (1991-92) student membership grew to 2,118,103 (2,579,896 WFTE), an increase of approximately 75,000 full-time equivalent students (Division of Public Schools, 1991), while having one of the largest and fastest-growing memberships in the nation, Florida ranks quite low in per pupil expenditures.

The third force contributing to the current state of affairs in Florida’s public schools is the already-mentioned economic recession. Florida is particularly tuned into the nation’s prosperity or lack of it, in that its number one industry is tourism. As the recession was felt in different states across the country, Florida became beset by a decline in the numbers of people who visited the state’s many recreational attractions annually. The state was not prepared to deal with the repercussions of this economic downturn. General revenue estimates based on gross sales tax receipts proved overly optimistic for the 1990-91 fiscal year. The following year proved to be no different. The axe fell, and Florida schools were rocked by a succession of budget cuts initiated by the governor to remedy a situation in
which educational appropriations were not being supported by revenue. To add insult to injury, the governor’s attempt to meet state constitutional requirements of a balanced budget by making cuts in it was challenged (even the state’s Chief Justice of the Supreme Court spoke out against it). In a suit brought by a Miami attorney on behalf of children involved in a state program for abused and neglected youngsters, the Florida Supreme Court found that under the Florida Constitution only the legislature had the authority to wield the axe to make cuts in the state’s budget and that the Florida statute on which the Governor relied for the power to cut the budget when revenues fell short was an unconstitutional delegation of legislative authority (Chiles v. Children A,B,C,D,E, and F, 1991). Following the Florida Supreme Court decision, the Legislature met in special session to make the necessary cuts in appropriations to balance the state’s budget.

Over the course of the two years, 1990-92, nearly two billion dollars were cut from the state’s budget, and revenue for the public schools was reduced by $650 million. Little relief was in sight. For at the end of their regular session, the 1992 Florida legislature was gridlocked over reapportionment, and failed by that time to pass a state budget for fiscal year 1993. Adequate funding of Florida’s schools and implementation of Florida’s restructuring initiatives were this time victims not only of the continued recession and decreased revenues but of political partisanship as well. Late in the spring 1992, Governor Lawton Chiles went on the stump in an unprecedented campaign to garner public support for a tax increase that would increase the education budget by 600 million new dollars (Diegmueller, 1992).
Impact on the Public Schools

The economic recession in Florida has had significant consequences for the 67 public school districts of the state. Table 1 demonstrates the trend in the funding of the public schools over the course of the last three years. The 1989-90 school year represents the base since it was the last appropriation prior to the onset of the recession. Table 1 illustrates that the student membership of the state has increased by 163,861 students. That number increased to 203,567 when program costs are factored. However, the Base Student Allocation (BSA) decreased by $114.61 per pupil. The Base Student Allocation represented revenue per pupil from the state's foundation program and accounted for nearly 85% of revenue appropriated for the public schools. A decrease of $114.61 per student represents a revenue loss over $290 million state-wide.

Table 2 shows the impact of revenue shortfall on the funding of categorical programs. Categorical programs are designed and funded to further specific legislative purposes. Revenue for categorical programs are student transportation, instructional materials, improvement, pre-school projects, writing skills enhancement, and compensatory education. The number of categorical programs declined by 15. The amount of revenue lost statewide was almost $265 million.

Table 3 indicates the effect of the recession and subsequent legislative action on the average real property tax levy to support the educational enterprise. The levy is a millage rate established annually by the Legislature on the assessed valuation of non-exempt real property. The rate is equalized to compensate for differences in the distribution of
property wealth throughout the state. The discretionary tax may be used by the local school districts for general educational purposes.

Table 3 demonstrates that the real property tax increased by one-half mill. This rate is required of all school districts. The increase represented an increased reliance on the local property tax to fund the educational enterprise. In effect, it was a tax increase. The decrease in the discretionary tax levy resulted in less discretionary revenue for local school districts.

The loss of revenue to the public schools, however, translates into a reality that is not represented by numbers alone. School districts throughout the state are finding ways to contend with the impact of budgetary cuts in varied ways: district office staff numbers are being down-sized; the number of school-based administrators and support personnel are being reduced; and those who are able are exercising early retirement options. Reduction in Force (RIF) notices to continuing contract personnel, nonrenewal of annual contract personnel, and even in some districts collectively bargained agreements to delay salary increases, are taking their toll on the morale within school districts. Retrenchment is presently the operating mode within Florida’s schools - school boards are "hunkering down" even as increased class sizes, shorter school days, reduction of graduation requirements, and cancellation of assorted programs and services are being discussed and/or acted upon at the state level. These retreats from previously supported educational reform measures are happening even while the state struggles to flesh out the infant Educational Accountability Act of 1991.
At the same time that the Florida Legislature has been grappling with the effects of the recession, it has also undertaken a new effort to decentralize the decision-making process throughout the state's system of public education. The initiative, termed "Blueprint 2000", is intended to eliminate centralization, external controls, uniformity, and accountability for process, and replace them with decentralization, internal initiatives, flexibility, and accountability for outcomes. In its most recent accountability legislation, The Educational Accountability Act of 1991, the Legislature provided for the implementation of a state system of school improvement and educational accountability based on educational programs and student performance, by the year 2000 (Florida Statute 229.591, Florida Statute 229.592, Florida Statute 229.593, Florida Statute 229.594).

Within the statute's language, the Legislature theorizes that this accountability plan will return the responsibility and give the reins of education to those closest to the students - that is, parents, teachers, and schools. Local school boards are established as the entities responsible for school improvement, and school advisory councils composed of teachers, students, parents, and other citizens representative of the ethnic, racial, and economic community are mandated to assist in the preparation and evaluation of the school improvement plan. However, the Legislature's recognition of its ultimate responsibility and of the State Board of Education's responsibility to supervise the state school system takes an interesting form within this accountability legislation. Individual schools will receive report cards indicating how well they achieved specified performance outcomes.
Schools achieving their specified performance outcomes would be rewarded. Those that do not would receive technical help and ultimately could face takeover by the state for continued failure. Official rhetoric notwithstanding, there are those who believe that the legislation was an attempt to shift the blame for poor educational performance from state level bureaucracies to local school districts, as Florida struggles with high dropout rates and low per pupil expenditures.

"Blueprint 2000" is calculated to attain seven broad Florida goals that read similarly to America 2000 national education goals. These Florida goals, as written into the Educational Accountability Act are:

1. Communities and schools collaborate to prepare children and families for success in school;
2. Students graduate and are prepared to enter the workforce and postsecondary education;
3. Students successfully compete at the highest levels nationally and internationally and are prepared to make well-reasoned, thoughtful, and healthy lifelong decisions;
4. School boards provide a learning environment conducive to teaching and learning that includes sequential instruction in mathematics, science, reading, writing, and the social sciences and appropriate educational materials, equipment, and pupil-teacher ratio;
5. Communities provide an environment that is drug-free and protects students' health and civil rights;
6. Schools, districts, and the state ensure professional teachers and staff;
7. Adult Floridians are literate and have the knowledge and skill needed to compete in a global economy and exercise the rights and responsibilities of citizenship.
Legislative blueprint for school improvement

In addition to the seven goals, the Educational Accountability Act of 1991 provided a year by year plan or blueprint through which school improvement was to be implemented. Phase I required school districts in year 1991-92 to submit a needs assessment for consideration by the Legislature. Phase II requires each school to develop a school improvement plan during the 1992-93 school year. The plans will be developed by the mandated school advisory councils and implemented during the 1993-94 school year; results will then be reported to the community annually. To oversee the development, implementation, and maintenance of the system of accountability, a 23-member commission was established. It will revise the results of school needs assessments, hold public hearings, recommend performance standards to the state board of education as well as assessment methods, rewards, and sanctions. If, in the opinion of the Commission, an adequate system of accountability is in place to protect the public interest, the Commission may recommend to the Legislature the repeal or revision of statutes, rules, and policies that the Commission finds in the way of improvement. School boards may request that waivers from certain rules and statutes be granted to schools to implement improvement plans.

Impact of the Accountability Legislation

The state is persisting in its efforts to get the mandates of the Educational Accountability Act of 1991 up and running. However, Commissioner of Education Betty
Castor acknowledges that the serious fiscal situation in which Florida finds itself, may dampen prospects for the accountability system which is intended to restructure schools. Besides the fiscal crisis, the new law also faces resistance from those who are comfortable with the more traditional, bureaucratic structure of schools, and are not ready to give it up (Rothman, 1992). School district personnel themselves, preoccupied and demoralized by the cutbacks of the last two years, do not all necessarily have the drive to make comprehensive changes in the structure of schooling, with notable exceptions. Others confuse restructuring with retrenchment (Brown, 1991), and see the new law as an attempt to put even more responsibility on the shoulders of already beleaguered educators. The latest wave of restructuring comes at a time when the public schools of the state are undergoing retrenchment. Retrenchment, inadequate revenue, and lack of incentives may interact to doom the latest reform initiatives in Florida, unless a new infusion of tax dollars arrives to save them.
Table 1

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<th>FTE</th>
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<tr>
<td>1989-90</td>
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REFERENCES


Florida Constitution of 1968.

Florida Statute 229.591
Florida Statute 229.592
Florida Statute 229.593
Florida Statute 229.594.


"Challenge" is the best, and perhaps only, word which describe the status of public education financing in Illinois during the last year. Some of the issues which are prominent in the agenda have been here for decades and continue to generate controversy and commentary others are outgrowths of parallel issues, and some are new. This brief look will focus on some of these issues as the education policy agenda, and with it the future of the structure of Illinois education financing continues its historic prominence in the public debates of Illinois policymakers.

The Challenges Before Us

In the past 20 years the changing face of American education has led to a number of issues which intimately affect how we conceptualize a publicly funded system of education. Odden (1992) likened these to "changing contours" on the landscape. His list included linking basic finance structures to education goals; site-based management and budgeting; teacher compensation issues; student performance accountability; choice; and nontraditional or noneducational children's services and argues that unless we "dramatically transform traditional notions of equity in school finance, expressed as dollar inputs at the district level" the system of public education, as we know it, will become extinct. He argues, too, that this transformation must learn to link financing equity to educational indicators...
which include both curriculum and instructional resources and that measures must move down to the school from district levels, and finally link variations in student achievements with both fiscal and programmatic resources.

**The New Illinois Public School Accountability Standards**

In March of 1991 a Task Force established by the Illinois State Board of Education submitted its final report for a new and dramatically revised system for the regulatory recognition and supervision of Illinois system of public K12 education. This committee, named the Illinois Regulatory Process Committee was composed of 29 individuals representing a broad range of the business, and education community of Illinois. Some of these were such influential individuals as then Deputy Mayor of Chicago Lourdes Monteagudo, Mr. Don Ames Assistant General Council for CNA Insurance, Harry Litchfield Manager of Training and Development of John Deere Company, George Munoz Chicago Attorney and political activist, and Jackie Vaughn President of the Illinois Federation of Teachers and the Chicago Teachers Union. The committee was chaired by Michael Skarr, Vice President of Northern Illinois Gas Company’s West Central Division. The committee worked for a period of six months under a charge to make recommendations to the State Superintendent of Education regarding a statewide regulatory process that focuses on student learning and reflects the nine guiding principles adopted by the State Board of Education. The process should provide for evaluating a school district contextually to determine if student performance is improving in keeping with district performance expectations and if the educational needs of all children are being met. A district would be evaluated against itself as well as against external indicators of quality. (p. i)
The nine principles referred to in this charge were adopted by the Illinois State Board of Education in April of 1990. These nine principles stated "The State Board of Education believes that it is time to change the public school regulatory process, that this should be achieved through a collaborative process based upon the following principles, and that providing flexibility of means, while assuring accountability for results, should guide the work of all those engaged in this major effort to improve education in Illinois." (p.ii)

These nine principles covered 1) improving educational goals & objectives; 2) placing priority on clear district student learning objectives, suitable measurement systems, and parent involvement; 3) confirmed presence/absence of the necessary elements of conducting schooling; 4) a defined set of levels of state attention for individual schools/districts related to the regulatory standards; 5) a sufficient number of levels to distinguish quality from mere compliance, 6) a provision for exemption for experimentation and innovation; 7) comprehensive & local public reporting of recognition status; 8) a range of appropriate state sanctions based on prevention of unacceptable conditions, and 9) appropriate due process provisions through which schools might appeal their recognition status. In the document’s preamble the committee clearly states the many issues and conflicts which arose between the implications of the new system and the need to establish high expectations for the State educational system. While the regulatory change in and of itself was not a piece of finance legislation it’s effect was as if it were. There is always a cost to change. The new regulatory process recognizes that "...the school building level must be the unit of analysis for accountability...". Schools in non-compliance may have to be modified, or in some extreme cases completely closed and students relocated to other
district schools which meet the new standards. This will create fiscal problems related to transportation, staffing, and numbers of children per classroom and teacher. The regulatory process and perhaps in some areas will be inconsistent with existing collective bargaining agreements. The creation of student performance profiles requires the keeping of additional information related to student assessments and post graduation placements. This will require additional manhour inputs from districts which will play itself out in additional dollars for certificated and non-certificated staffing. The recommendation on principle #4 requires that "...high performance expectations (standards) for all indicators should be established by the Illinois State Board of Education for all schools...all schools must have an improvement plan in order to meet the law. However, having a plan for improvement and improving are two different items. Schools must demonstrate improvement. Performance that is relatively equal from year to year should not be considered improvement unless performance is exemplary or it exceeds expectations." This sentence alone could require an enormous investment by individual school districts. For those districts already spending well above the state and national per pupils expenditures and performing at high achievement levels this could be a very costly item. Since recognition will be predicated on movement, i.e., improvement, not maintenance it will become necessary to invest in more unique and innovative program delivery systems. Such systems usually entail higher than usual investments in specialized teachers, facilities, or equipment which can artificially increase the relative costs of education. Principle #5 calls for a world-class educational system. Yet, Illinois is in the process of calling for a constitutional amendment to guarantee education as a fundamental right, and placing a
challenge against the current funding system as a violation of the "thorough and efficient" clause of the state constitution. The cognitive dissonance between intentions and reality continue to plague the policymakers of Illinois. The rhetoric is there, the will to follow through continues to be illusive.

The Property Tax Limitation Cap

Public Act 87-177

...limits the increase in property tax extensions to 5% or the percent increase in the national Consumer Price Index (CPI), whichever is less. The Act first applies to the 1991 levy year for taxes payable in 1992. Increases above 5% or the CPI must be approved by the voters in a referendum. (p.1).

This Act was signed into law on July 25, 1991 and became effective October 1, 1991. It imposes a mandatory property tax limitation on taxing districts located entirely with the counties of Illinois contiguous with Cook County (i.e., DuPage, Kane, Lake, McHenry, and Will - also known in Illinois as the "collar counties"). Counties also effected are those which overlap into other counties but whose major equalized assessed valuation (EAV) for the 1990 levy year is in the collar counties, otherwise the provisions do not apply. Home-rule taxing districts were not affected by this Act of the Illinois legislature. The Act also established a uniform levy date for all taxing districts in every county of the State of Illinois. In addition all taxing districts (or portions, thereof) located in Cook County are required beginning with the 1992 levy years, for tax bills payable in 1993, to utilize the prior-year equalized assessed value of property for purposes of calculating the extension amount. This meant that the most a taxing district could raise for a single fund is the maximum tax rate for that fund times the prior-year EAV for all
effected property. Current-year EAV is used for any property not located within Cook County for affected districts with overlapping boundaries across county boundaries. While this limitation was strongly supported by tax accountability groups it was not so by public school taxing districts. The collar counties surrounding Cook County in Illinois contain many of the state’s historic "lighthouse" school districts where local leeway (and control over both program and expenditure levels) has a long and respected tradition. The tax cap, in effect, limited their ability to capture natural local growth beyond the cap limit or the CPI. In the first year of the Act all districts were given the 5% growth on their calculated base, regardless of how the CPI actually behaved. The base was calculated on the highest extension of the district within three years prior to the enactment of the Act. In this way districts who decreased their aggregate extensions in the prior year were not unduly harmed by the imposition of the Act. In addition, certain adjustments and exemptions such as prior approved referenda or a rate increase approved prior to December 21, 1988 in which the district did not impose the maximum new rate, allowed a proportional increase over the first four years in which the increase is effective. School districts in the collar country area, unfortunately, were caught in a double bind. Not only had the state share of the General State Aid formula steadily decreased from a high of 48% to the present 38%, but they now could no longer capture needed local growth to compensate for decreased revenues. In addition any referenda-approved rate increase above the natural 5% allowed was only authorized for one levy year, after which another referenda would be required. This cap was implemented to slow the incredible growth in the collar county property assessed values. Local property owners in some communities between growth and
reassessment were experiencing as much as 200-300% increases in their tax extension bills. While the school districts in these communities have historically supported rate increases for educational purposes the need to slow or stop the growth in the local tax was combining with the national trend of decreased educational support and demands for greater returns (benefits) with lowered personal costs. The net effect however, was a reduction in the available dollars for public education in the collar counties of Illinois.

After the initial passage of the "Resource Equalizer" the legislature over a several year period of time tinkered with the formula. First, they repealed the roll back provision for high wealth districts who wished to spend beyond the formula's limits. Next the legislature changed the methods used for assessment of farmland from the traditional ad valorem system to one which valued production, thus drastically reducing the revenues due to many rural school districts. At the same time the land in the collar counties surrounding Chicago were experiencing unparalleled economic growth. All of this combined with a decrease in downstate student enrollments to produce an Illinois schooling system of the "haves" and "have nots". Finally, in 1985 Illinois like many other states, enacted a major educational reform package which promised the school districts new funding of $250 million per year for four years. Unfortunately, the legislature did not keep its funding promises, while it continued to mandate adherence to the tenets of the 1985 reform legislation. During this same time frame Illinois had also passed a major collective bargaining law affecting public employees, all of which added up to greater accountability, increased costs, more mandates, a broader and needier schoolage population and a resource base of insufficient size to meet its increased educational demands. The
vagaries of the Illinois funding mechanism and its approach-avoidance of elusive equity
goals had been tracked closely by the Center for Education Finance at Illinois State
University under the leadership of Dr. G. Alan K. Hickrod and others since 1973.

The Constitutional Amendment and The Education Lawsuit on Funding

In order to understand the current move toward a constitutional amendment and
the lawsuit one must first look at the historical development of the current Illinois funding
mechanism. Back in 1973 the Illinois legislature passed a new funding formula ("The
Resource Equalizer") prompted by the legislature's knowledge of the recent decision in
California in Serrano v. Priest and several Illinois legislators believed Illinois was
vulnerable to a similar suit. Secondly the state had recently enacted a state income tax
with the potential to bring millions of new dollars into the state treasury, and finally this
new formula would permit the removal of an antiquated flat-grant and alternate method
formula (for districts not qualifying for the flat grant) systems. When the current formula
was proposed and first enacted there were several features which made it particularly
attractive. It contained a reward for effort - that is, when a district raised its local tax rate
for education (thereby increasing their local effort) they received an increase in state dollars
as well. Next there was a "spending cap" provision. This enabled local districts to provide
property tax relief and finally there was a new component which recognized the impact
that educating low Socio-economic status children presented local district resources. This
impaction factor compared the percentage of Chapter 1 eligible students against the
statewide average. Districts which were significantly higher were rewarded with additional
state funds through the formula. In 1989 Dr. Hickrod of ISU along with Dr. James Nowlan of Knox College and Dr. James Ward of the University of Illinois at Urbana-Champaign wrote several papers on the elusiveness of achieving equity and adequacy in Illinois' public schools. At a meeting of the Voice of the Prairie organization in 1989 these individuals presented the facts and developed a consensus that the only way to achieve these goals in Illinois was to file a lawsuit similar to that which had been filed in Kentucky, New Jersey and West Virginia. Since only those who are aggrieved by a law can bring suit against it the group helped to establish the Coalition for Educational Rights Under the Constitution. The organization had three primary goals: 1) to acquire adequate educational funding; 2) to establish equitable distribution of funds among all of Illinois school districts; and 3) increase the economic efficiency of the school districts of the state.

The Coalition was officially formed on February 16, 1990. A preliminary group of 35 school districts sent representatives and Hickrod, Nowlan, Ward, and several others were elected officers. As of August 1990 forty-seven school districts were involved. The lawsuit was filed in Chancery Court, Cook County, Illinois on November 13, 1990. The suit alleges violation of three provisions of the Illinois Constitution of 1970; that the statutory scheme of school finance imposes unconstitutional effects and burdens on the plaintiffs; that there is discriminatory distribution of educational resources which is unconstitutional; there is failure to provide certain children an adequate minimum of educational services under the Education Article of the 1970 Constitution, and lastly, that there is failure to provide an efficient system of high quality public education for every child in Illinois public schools.
The second part of the agenda of the Coalition was to mount a campaign to have the Illinois Constitution of 1970 amended so that education would become a fundamental right within the state and thus make the state responsible for the majority of the funding required for public education. The proposed educational amendment will appear on the Illinois electoral ballots in November, 1992. The proposed amendment reads:

PROPOSED NEW ARTICLE X - Education

Section 1. Fundamental Right – Free Schools

A fundamental right of the People of the State is the educational development of all persons to the limits of their capacities.

It is the paramount duty of the State to provide for a thorough and efficient system of high quality public educational institutions and services and to guarantee equality of educational opportunity as a fundamental right of each citizen. Education in public schools through the secondary level shall be free. The State has the preponderant responsibility for financing the system of public education.

There may be such other free education as the General Assembly provides by law.

The changes in meaning and wording are highlighted by the underscores. The concepts of education as a fundamental right does not currently exist under the present education section of the constitution. "Paramount" is defined as before and superior to others thus making it the first duty of the state to provide a system of high quality public education. The thorough and efficient section is already included in the constitution but its meaning is being clarified to require a substantially equal mix of courses and to account for the individual needs of all children and that public education must be "wealth neutral" or a function of the state as a whole and not just that of local school districts. The
equality of educational opportunity section means that regardless of geographic location or economic situation all are entitled to the same level of educational goods and services. Finally, the preponderant responsibility is set to create the duty of the state to fund education at a minimum of more than half the cost of an adequate education. An adequate education cost to be determined by the Illinois General Assembly and preponderant is more than the "primary" responsibility as stipulated in the current constitutional wording of Article X.

THE YEAR TO COME

At the beginning we quoted Odden’s "changing contours". Illinois seems to be moving toward some of what Odden challenged us to be. The Regulatory Process changes has tied school recognition to clear goals and student outcomes. It has placed an emphasis on student performance accountability, and devolved responsibility to the local school site level. However, there are many areas in which substantial movement needs yet to be accomplished. First, Illinois has not linked basic finance structures to its education goals; second outside of Chicago, there is no mandate for site-based management or budgeting; issues of teacher compensation continue to be an issue for all of Illinois districts; the issue of choice has not been settled, and the provision of children’s services and nontraditional educational delivery is controversial at best, and contentious at the very least. The Illinois state budget is woefully overcommitted, and the State Department of Children and Family services is under a court-order to reduce caseloads/social worker in order to provide better and consistent services to children and families. The governor’s appointment of a new Director for this agency will hopefully bring about the desired changes, but given the
state's tight financial picture, one must be skeptical at the very least. It appears, then that the initiation of the finance lawsuit, and the increased call for accountability once again leaves Illinois funding system in a virtual "no-win" situation...great expectations, great demands, but little legislative will in the form of additional resources leaves it to chance alone that the children of Illinois will be better off in FY93 than they are in FY92.

2. Ibid, pg. 461.


Introduction

Few states face the challenge of New York's economic, demographic, and social diversity in regard to construction of an equitable and efficient school finance system. To their credit state policymakers, historically and at present, have not shied away from this challenge, and as a result, the current school finance system reflects the state's complexity. In addition, New York has had a rich history of education reform with the 1980s representing a particularly active time. Yet in spite of a decade of reform, important policy questions as to the efficiency and equity of the current financing system remain unanswered, particularly in light of significant increases in state resources allocated to schools. This paper examines state level fiscal and educational outcome data in order to offer insights to policymakers. While the approach is admittedly descriptive, openly acknowledging that further research needs to be done, particularly with inferential statistical analysis, it represents a needed overview and context for future analysis.

State Resources and Educational Returns

This section of the paper presents data on state resources dedicated to public elementary and secondary education and educational returns for the 1985/86 through 1989/90 school years. More specifically, data is presented on the following: school district expenditures and teacher salaries; local revenue bases and fiscal effort; conditions of teaching and educational...
teacher salaries; local revenue bases and fiscal effort; conditions of teaching and educational outcomes. These categories of data are first presented for the state as a whole and then by four strata of school districts: urban; upstate suburban and small city; downstate suburban and small city; and rural. All data unless noted otherwise were provided by New York State Department of Education.

New York state has consistently ranked among the highest in per pupil expenditures in the nation for many years, and this trend continued during the 1980s. (Digest of Education Statistics, 1990, p.157) Even when measured in constant dollars, the growth of educational expenditures during the latter part of the 1980s was phenomenal. During this time period operating expenditures for school districts grew from $12.8 billion to $17.2 billion or 34.2% in non-adjusted dollars or 15% in constant 1985/86 dollars.

Teacher salaries accounted for a substantial portion of increased expenditures, rising from $5.49 billion in 1985/86 to $7.66 billion in 1989/90, an increase of 39.5% or 19.5% in constant dollars. At all career stages, teacher salaries outpaced the cost of living. For those in the early years of their careers (0-5 years experience), the average salary rose 32.3% or 13.4% in constant dollars. The average salary rose from $21,318 to $28,210. Those at midcareer (11-15 years experience) saw their salaries increase 24.5% or 6.7% in constant dollars, with the average salary rising from $29,448 in 1985/86 to $36,654 in 1989/90. Teachers in the later stages of their careers (21 to 25 years experience) achieved a salary increase of 31.0% or 12.2% in constant dollars for this period. The average salary rose from $36,769 to $48,033. While expenditures for education in general and teacher salaries in particular rose dramatically, enrollments declined slightly, from 2,546,675 to 2,501,091 students, or 1.8%.
A more precise gauge of educational spending is per pupil expenditure; over the five year period, it rose from an average of $5,039 to $6,883. These figures represent a 36.6% increase or 17.1% in constant dollars, revealing that the magnitude of increase in expenditure when measured in per pupil terms is even greater than the bottom line of total expenditure.

On the revenue side, it is helpful to examine the relative shares by levels—local or school district, state, and federal—as well as the revenue bases. Over the five year period the relative proportions remained stable: the state and local shares rose slightly, from 41.3% to 41.5% at the state level and from 54.7% to 54.9% at the local level while the federal share declined from 4.0% to 3.6%. However during this period, local revenue bases, defined as real property and personal income, rose dramatically. Real property, measured as property value per pupil, increased 47.5%, from an average of $94,100 to $138,800 in nominal dollars. Income per pupil was not far behind with a gain of 44.4%, from an average of $47,300 to $68,300 in nominal dollars. As revenue bases were rising steadily, local property tax effort was falling substantially, from an average tax rate of $26.19 per $1,000 assessed valuation in 1985/86 to $19.49 in 1989/90, a decrease of 26%.

With regard to student outcomes, the picture over the last five years was one of modest gains. Here two types of educational outcome data are presented: student test scores at or above the state reference point, a measure of minimal competency, at the third and sixth grade levels in reading and mathematics; and the percentage of high school graduates pursuing postsecondary education.

In terms of reading scores, there were slight improvements in the percentage of third and sixth graders who scored at or above the state reference point. Eighty-one percent of
third graders scored at or above the state reference point in 1989/90 as compared to 79% in 1985/86, an increase of 2%; while 84% of sixth graders did so in 1989/90 as compared to 79% in 1989/90, an increase of 5%. Greater gains were made in mathematics. In 1989/90, 94% of third graders met or exceeded the state reference point, an increase of 8% from 1985/86. Ninety-one percent of sixth graders scored at or above the state reference point in 1989/90 as compared with 82% in 1985/86, an increase of 9%. The percentage of high school graduates pursuing post-secondary education increased 5.4% during this time period, from 71.3% in 1985/86 to 76.7% in 1989/90.

Teaching conditions, such as student/teacher ratio and class size, showed marked improvement over the five year period. Other conditions, such as number of periods taught and preparations for subject matter teachers remained stable. Student/teacher ratios dropped from an average of 15.9/1 to 14.7/1, and class size at all levels from kindergarten to high school decreased, with average class sizes in 1989/90 ranging from a low of 21.4 students in kindergarten to a high of 24.9 students in ninth grade math. At the same time the average number of periods taught by teachers remained stable, around 5 per day, and the number of preparations for subject matter teachers remained around 2.

While not insignificant, the magnitude of improvement in student outcomes might be viewed with disappointment given major infusions of resources, improved teacher salaries, and teaching conditions. In addition, the erosion of local tax effort should raise concern on the part of state policymakers.

**Urban School Districts.** The urban stratum contains school districts in the six largest
cities in New York: Buffalo, Rochester, New York City, Syracuse, Yonkers. During the five year period educational expenditures for urban school systems grew at a rate slightly above the state average; that is, for urban school districts expenditures increased at 36.2% in nominal dollars or 16.7% in constant 1985/86 dollars compared with the state average of 34.2% and 15.0% respectively.

Total expenditures for teacher salaries in urban school districts rose from $4.27 billion in 1985/86 to $5.81 billion in 1989/90, an increase of 36.0% or 16.6% in constant dollars—while somewhat below state averages, this still represents a substantial increase. Consistent with state trends, average teacher salaries in urban centers rose faster than the cost of living although teachers in the early and later stages of their careers garnered larger increases than those at midcareer. For teachers early in their careers, average salaries increased 33.1% or 14.1% in adjusted dollars, from $22,343 to $29,740. Teachers at midcareer saw the smallest gains of 18.2% or 1.3% in adjusted dollars; their average salaries rose from $33,425 to $39,506. Those in the later stages of their careers received salary increases of 31.4% over the 5 year period or 12.6% in adjusted dollars, with the average salary rising from $38,050 to $50,000. At all stages of their careers, teachers in urban school districts outearned their statewide counterparts. As educational expenditures and teacher salaries increased in urban centers, student enrollments declined slightly from 1,951,952 to 1,948,612 students, a decrease of .2%.

Per pupil expenditures rose at approximately the same rate as the statewide average. From 1985/86 through 1989/90, average per pupil expenditures in urban centers increased from $4,852 to $6,622, an increase of 36% or 16.6% in adjusted dollars, as compared to the state average of 36.6% and 17.1% respectively. However, urban centers spent at a level 4%
below the state average of $6,883 per pupil for 1989/90.

In terms of the local, state, and federal shares in financing education, urban school districts experienced a shift toward a greater state share. Over the five year period, the state share of educational revenues rose from 38.9% to 43.9% while the local share declined from 53.7% to 49.7%. At the same time, the federal share declined slightly from 7.4% to 6.4%. The shift toward greater state support was not mirrored statewide as state and local shares remained fairly constant at 41.5% and 54.8% respectively. Although urban revenue bases increased sharply during this period with property value per pupil rising 45% and income per pupil, 38%, both lagged a few percentage points behind statewide averages. Average property value per pupil rose from $88,501 to $128,391 while income per pupil increased from $50,441 to $69,618 in nominal dollars. However, local property tax rates for education, a measure of local tax effort, plummeted 34% from an average rate of $27.25 per $1,000 assessed valuation in 1985/86 to $17.83 in 1989/90. The latter fell below the state average of $19.49, indicating urban property taxpayers were making a smaller effort than their statewide counterparts while utilizing a relatively larger share of state resources.

Although educational outcomes in urban centers improved over time, they fell short of state averages in reading and mathematics. With regard to reading scores, 66% of third graders met or exceeded the state reference point in 1989/90 as compared to 61% in 1985/86, an improvement of 5%, substantially below the state average of 81%. Seventy-two percent of sixth graders scored at or above the state reference point in reading, an increase of 8% over 5 years prior, but still below the state average of 84%. Improvements in mathematics were more dramatic. In 1989/90, eighty-eight percent of third graders scored at or above the state
reference point as compared with 70% in 1985/86, a marked increase of 18%, but below the state average of 94%. Eighty-one percent of sixth graders scored at or above the state reference point in 1989/90 as compared to 65% in 1985/89, a substantial improvement of 16%, yet 10% below the state average. The percentage of high school graduates pursuing post-secondary education rose 2.8%, during this period to 79% in 1989/90, a rate of 2.3% above the statewide average.

Conditions of teaching improved with student/teacher ratios declining from 17.8/1 to 16.4/1 over this period. At all levels class size decreased. Elementary classes decreased from 27.6 to 26.8 student, significantly higher than the state average of 23.5 students. For subject matter teachers in urban schools, periods taught per day and number of preparations remained stable at 4.6 and 1.9 respectively. While urban teachers taught larger classes than their statewide colleagues, their teaching load was somewhat lighter.

Upstate Suburban and Small City School Districts. School districts in suburbs that ring major urban areas and small cities in upstate New York comprise this stratum. This approach to grouping suburban and small city school districts was taken after a preliminary review of the data revealed greater similarities in the revenue bases when these school districts were grouped by geographic region than by type of population center. This stratum contains 293 school districts, 50 located in small cities and 243 in suburbs, representing approximately 30 percent or 729,536 of the state’s 2.5 million students.

From 1985/86 to 1989/90, educational expenditures for this group of school districts increased from $3.23 billion to $4.32 billion, and increase of 33.5% in nominal dollars or
14.4% in adjusted dollars, a rate of growth slightly below that of the state as a whole. However, expenditures on teacher salaries grew at a slightly faster pace, rising from $1.34 billion to $1.92 billion, an increase of 43% or 22.4% in adjusted dollars. Statewide, expenditures on teacher salaries grew 39.5% or 13.4% in adjusted dollars. Average salaries for teachers at all stages of their careers increased more rapidly than the cost of living and outpaced state averages. For teachers in the early years of their careers, the average salary rose from $18,254 to $25,478, an increase of 39.5% or 19.5% in constant dollars. At midcareer levels, teachers did not fare as well as their junior and senior colleagues. Their average salaries increased from $24,830 to $31,785, an increase of 28.0% or 9.7% in constant dollars. Teachers in the later stages of their careers saw their average salaries increase from $31,171 to $41,573 or 33% or 14.2% in adjusted dollars. During this period as expenditures and average salaries rose, student enrollments fell one percent, from 736,124 to 729,536.

For upstate suburbs and small cities, per pupil expenditures rose from an average of $4,426 to $5,964, an increase of 35% or 15.4% in adjusted dollars. While the rate of growth on expenditures on teacher salaries exceeded that statewide, growth in per pupil expenditure lagged behind the state average.

Unlike their urban counterparts, upstate suburban and small city school districts saw a shift toward a smaller state share of educational revenues and a larger local burden. From 1985/86 to 1990, the state share dropped from 53.9% to 46.6% of educational revenues while the local share rose from 43.5% to 50.8%, with the federal share remaining the same, 2.6%. In 1989/90 this group of school districts more closely resembled the statewide average shares for the various levels of government. However, the revenue bases for this group of school
districts did not grow as rapidly as the state average. Average property value per pupil rose 34% over this period, from $84,206 to 112,622; income per pupil increased from $40,875 to $57,269 or 40%. Property tax rates declined slightly, from an average of $21.59 per $1,000 assessed valuation to $20.70, the latter slightly above the state average of $19.49.

Educational outcomes for this group of upstate school districts showed modest improvement in all areas except third grade reading where the percent of student scores exceeding the state reference point dropped one percentage point, to 89% in 1989/90. The percentage of sixth graders scoring at or above the state reference point rose 5 percentage points over the 5 year period, from 86% to 91%. Percentages for mathematics scores showed improvement at both levels. At the third grade level, the percentage of students meeting or exceeding the state reference point increased slightly from 96% to 98%. The percentage of sixth graders increased from 91% in 1985/86 to 97% in 1989/90. All of these exceed the state averages by several percentage points. Finally, the percentage of high school graduates pursuing postsecondary education rose from 66.1% to 73.3% over the five year period, an increase of 7.2%, below the state average of 76.7%.

At all levels, elementary and secondary, teachers in this group taught somewhat smaller classes than their statewide colleagues. For upstate school districts, the student/teacher ratio in 1989/90 was 14.2/1 as compared with 15.4/1 in 1985/86. Class sizes at the elementary levels remained stable at 22.3 while kindergarten classes dropped .5 students to 20.7. At the secondary level decreases in class size were more notable; for example, American Studies classes averaged 22.0 students in 1989/90, 1.9 students below the average 5 years earlier.
Downstate Suburban and Small City School Districts. This stratum contains 176 school districts, 7 in small cities and 169 in suburbs, and represented 514,549 students in 1989/90, or approximately 20 percent of the state's student population.

Over the 5 year period, educational expenditures rose from $3.65 million to $4.76 million, a 30.0% increase in nominal dollars or 11.4% in adjusted dollars while statewide expenditures increased 34.2% or 15.0% in adjusted dollars for the same time period. Expenditures for teacher salaries, while increasing substantially from $1.52 million in 1985/86 to $2.06 million in 1989/90 fell below the state rate of growth. For downstate districts teacher salary expenditures grew 35.0% or 15.4% in constant dollars; statewide the rate was 39.5% or 19.5% in constant dollars. Expenditures on education in general and teacher salaries in particular for this group of school districts rose less rapidly than the state average.

At all stages of their careers teacher salaries grew at a rate considerably above the cost of living. For teachers early in their careers, the average salary increased 37.0% or 17.5% in adjusted dollars, or from $24,286 in 1985/86 to $33,322 in 1989/90. At midcareer levels, the average salary increased from $34,515 to $44,757, an increase of 30% or 11.4% in adjusted dollars. Teachers later in their careers also saw improvements in average salaries, from $40,213 to $54,100; over the 5 years, this represents an increase of 35.0% or 15.4% in adjusted dollars. At all levels average teacher salaries for downstate school districts exceeded state averages.

Per pupil expenditures grew at a rate slightly above that of the state, but downstate school districts chose to spend at much higher levels. In 1985/86, this group of school districts spent $6,901 per pupil compared to the state average of $5,039. By 1989/9, the gap had widened considerably with downstate school districts spending on average $9,548 per pupil,
almost $3,000 above the state average of $6,883 in nominal dollars.

Given the tremendous difference in revenue bases and levels of expenditures, it is not surprising that these districts relied more heavily upon local resources to finance education. Over the five year period, the state share declined slightly while the local share rose with the federal share remaining stable. The state share grew from 65.1% in 1985/86 to 69.7 in 1989/90 while the local share declined from 33.0% to 28.5%. The federal share changed from 1.9% to 1.8%. At the same time, local tax effort diminished by approximately one-third, from a tax rate of $29.65 to $20.21, placing these districts slightly above the state average of $19.49. The growth in revenue bases far exceeded the state rate of growth. With regard to per pupil property values, the average rose from $127,484 to $206,422, an increase of 62.0%. While less dramatic, per pupil income rose from $68,779 to $108,229, a 57% increase in nominal dollars.

While educational outcomes exceeded state averages, for the most part they did not improve to the same extent, and with regard to third grade reading, the percentage of students meeting or exceeding the state reference point actually fell three percentage points, from 93.0% to 90.0%. The percentage of sixth graders scoring at or above the state reference point in reading rose 4%, from 87% to 91%. For mathematics there were also small gains. At the third grade level, 98% of third graders met or exceeded the state reference point, an increase of only 1%, but exceeding the state average of 94%. At the sixth grade level, 96% scored at or above the state reference point, an improvement of 3%. The percentage of high school graduates pursuing postsecondary education also rose from 73.7% to 77.2%, the latter slightly above the state average of 76.7%.

At all levels, class size declined and remained below the state averages. The overall
student/teacher ratio declined from 13.8/1 to 12.6/1, substantially below the state average of 14.7/1. Secondary classes showed the largest decline; for example, American studies declined from an average of 22.3/1 in 1985/86 to 20.4/1 in 1989/90.

Rural School Districts. New York's 220 rural school districts contained 225,463 students in 1989/90, approximately 10%, of the state's student population of 2.5 million.

Of all groups, rural school districts evidenced the most dramatic increases in total operating expenditures and teacher salaries. Educational expenditures grew 40.3% or 20.2% in adjusted dollars from 1985/86 to 1989/90, from $914 million to $1.28 billion. Teacher salary expenditures increased 51.5% or 29.8% in constant dollars, from $362 million to $548 million. Average teacher salaries also grew from 30% to 40% in nominal dollars during this time period. At the early career stages, average salaries increased from $17,100 to $24,091, an increase of 40.9% or 20.7% in adjusted dollars. For teachers at midcareer, average teacher salaries increased from $22,470 to $29,524, an increase of 31.4% or 12.6% in constant 1985/86 dollars. At the later career stage, average salaries increased 34.4% or 15.2% in adjusted dollars, from $27,972 to $37,593. As expenditures rose steeply, student enrollment increased 1.5%, from 222,036 to 225,463. Per pupil expenditures rose 38% over this period, from an average of $4,120 in 1985/86 to $5,693; however they remained well below the state average of $6,883.

More consistent with state trends, the relative revenue shares of local school districts, state, and federal government remained stable. In 1989/90, 38.5% of revenues came from the local level, 58.9% from the state, and 2.6% from the federal government. Five years earlier, these shares were 38.4%, 59.0%, and 2.6% respectively. However rural revenue bases did not
benefit from the same rate of growth as other parts of the state. Average per pupil property values rose 24.1% from $77,817 to $96,566 while average per pupil income rose more rapidly or 40.9%, from $25,606 to $36,065. At the same time, property tax effort increased slightly, from $18.95 to $19.23, but remained below the statewide average of $19.49.

Educational outcomes for rural school districts exceeded the state averages even though the percentage of third graders that met or exceeded the state reference point for reading fell 1% to 89%. At the sixth grade level there was a 6% improvement, from 86% to 92% of students scoring at or above the state reference point in reading. The percentage of students scoring at or above the state reference point in mathematics increased at both third and sixth grade levels. At the third grade level, 98% of students met or exceeded the state reference point in 1985/86 as opposed to 96% in 1989/90. For sixth graders, the degree of improvement was more dramatic, rising from 90% in 1985/86 to 97% in 1989/90. In both reading and mathematics, these percentages exceeded state averages by several points. The percentage of high school graduates pursuing postsecondary education also rose over this time period, from 73.7% to 77.2%, an increase of 3.5%, placing the rate slightly above the state average of 76.7%.

Rural school districts enjoyed smaller classes and a lower student/teacher ratio than the state average in both 1985/86 and 1989/90. The average student/teacher ratio fell from 14.8 to 13.8 for rural school districts, below the state averages of 15.9 in 1985/86 and 14.7 in 1989/90. Average class sizes increased slightly at the elementary level, from 21.1 to 21.5 students; however this is still below the state average of 23.5. At the secondary level class size remained stable or dropped. For example ninth grade math classes decreased from 21.6 to 20.4 students over the five year period.
Conclusions and Policy Implications

What does all of this mean for state policymakers? At best the trends displayed here are cause for concern and at worst reason for alarm. After five years of significant increases in state resources, public elementary and secondary students achieved only modest improvements in educational outcomes, with urban students still lagging behind. While the state allocated greater resources to education, local tax effort declined substantially in most areas of the state, by as much as one-third. These are symptoms of an inefficient and inequitable system. Realistically the state cannot continue a massive influx of dollars to education as the last two budget cycles indicated. Hence policymakers must focus on more efficient use of the current level of resources with all local school districts making a state-prescribed minimum effort in order receive state funds. Equity goals will not be achieved not through the infusion of new dollars to level up but by careful examination of current formulas with the goal being a redistribution of current resources in a more administratively efficient manner.

Policymakers must resist the temptation to add to an already overly complex configuration of funding formulas but instead cut out the underbrush of small special interest categorical grants and rechannel those funds to achieve broader policy goals. Simultaneously the basic aid formula must be pruned of guarantees and save harmless provisions that benefit more affluent districts and prevent the equalizing portions of the formula from having their intended effect. In their place must be placed minimum property tax effort provisions that require all districts, rich and poor, to make a reasonable effort to support education.
much research needs to be done which may lead to broader recommendations, the above represent small, but significant steps toward greater efficiency and equity in funding education in New York.

Notes


2. Education reform here refers to the range of education reform, including programmatic and fiscal. The most recent of comprehensive reform proposals, currently in the process of implementation, is A New Compact for Learning (Albany, NY: The University of the State of New York, State Education Department, 1990).

3. Tuition, transportation, and debt service were excluded from this calculation, but when they were added, the percentages remained approximately the same.

4. On the heels of several years of large increases of resources to education, the state faced reducing appropriations to education midyear, 1990-1991. For details, see State Aid for Public School Districts and Deficit Reduction Assessments (Albany, NY: New York State Education Department, 1991).
REFERENCES


INTRODUCTION

Somnolent used to be an apt phrase to describe the financial politics of education in Pennsylvania. Until the 1990 census it was the fourth largest state in the country. Florida has pulled ahead, so Pennsylvania now places fifth, at about 12 million people. Pennsylvania is also one of the oldest and least mobile states. There has been a steady outmigration of younger people searching for work, with relatively limited immigration. Its state policymakers have been struggling like many others to balance budgets in a recession. The state has recently been making the news with its innovative reform efforts, surprising those in other states.

* Last year the state faced a contentious deficit that resulted in the largest tax increase in its history.
* The final budget included major reforms in special education and pensions.
* Last fall the fur flew over a bill that would have made Pennsylvania the first state in the nation to fund vouchers for public and private schools.
* This spring, new, revenue-driven regional approaches were introduced in binding arbitration, forcing new thinking about the contribution of local districts to regional workforce development.
* The state became the first in the nation to adopt curriculum and planning guidelines that focus on student learning outcomes.

Who would have thought that Harrisburg would become a hotbed of national education reform activity?

1991-92: NEW TAXES

The 1991-92 budget was not settled until August 4, 1991, thirty-five days into the new fiscal year. It was one of the meanest legislative slugfests that naturally ornery Pennsylvanians had seen.
in many years. Most reasonable folks were just embarrassed by it all. The juggernaut was created across the Democratic governor, Bob Casey, the Republican Senate and a Democratic House unhappy with the governor's politics of risk shifting. The governor flat out lied about the state's budget health in order to get re-elected, so the Republicans were in no mood to make it easy for him. Bad blood had been festering for years over negative campaigning, so neither side had much good will walking into the back rooms.

Pennsylvania has a large legislature: fifty in the Senate and two hundred and three in the House. This tends to create two contradictory conditions. First, state politics are highly localized. Second, this unwieldy number leads to concentrated decision-making. A common story told in Harrisburg is that only ten or twelve people make all the decisions; the rest spend their time looking good back home. This climate leads to lots of last minute horse trading that doesn't always have much to do with the longer term interests of the state. Every once in a while, they embarrass even themselves. This was one of those years.

The personal income tax was raised from 2.1 to 3.1% for one year, effective August 1, 1991. Note they didn't decide this until August 4th. This made them very popular with those in charge of payroll. Effective August 1, 1992, the tax drops back to 2.8%. The governor and the legislature held firm on their decision to keep the rollback, despite another bad year for revenues.

The state sales tax was expanded to include all kinds of things that people had no idea how to count. The expansion included certain business services (personnel supply, building cleaning and maintenance, credit reporting and collection, secretarial, customized software, etc) storage, lawn care, lobbying, non-basic cable TV, exterminator and household paper and cleaning products, and long distance telephone charges. Periodicals were added to the list; their revenues were dedicated for mass transit assistance (total sales tax- $319mm). Other new taxes dedicated to mass transit assistance included: a) a one dollar tax per tire collected at purchase ($5mm); b) a $2 per day tax on car
rentals ($40mm); c) and a three percent tax on car leases ($45mm). The expanded sales tax kicked in on October first, so you can imagine the scramble to clarify the hastily drawn compromise legislation.

In addition, smokers took a hit as the cigarette tax was raised from 18 to 31 cents per pack ($108mm). The corporate net income tax was raised from 8.5 to 12.25% ($601mm). Capital stock and franchise taxes were raised from 9.5 to 13 mills ($307mm), but were also scheduled for a rollback. The utility gross receipts tax was increased from 44 to 50 mills ($73mm); the public utility property tax was raised from 30 to 42 mills ($143mm) and the collection process was accelerated; insurance premiums taxes were expanded to include nonretirement annuities ($45mm); the bank shares tax payment process was accelerated ($20mm); and the oil company franchise tax was raised from 5.5 to 11% ($239 mm-with its revenues dedicated to highway and bridges projects-split 80% state, 20% local government). The grand total in anticipated new revenues? $3,304mm.

According the Pennsylvania Economy League's Census Bureau statistics, the state and local per capita tax burden was $1888 in FY 1989, the latest available year. Alaska was at the top at $3992 and Mississippi was at the bottom at $1184. Pennsylvania was the median state in 1988. Its difficult to estimate how much these tax increases will affect the state's standing, because other states have also raised taxes.

1991-92: SPENDING

The two big winners were basic education and county human services. The state education formula was the biggest winner ($199.5mm). This brought the basic formula, called ESBE, to just under $3 billion, or 21% of the entire state General Fund. This relatively large increase caused another mess. Local school districts had set millage rates in anticipation of state revenues and some overestimated.
The legislature, looking both for bones to throw to the taxpayers and ways to let them know that much of the new revenues went to schools, passed Act 25 of 1991, which required districts to refund the excess collection. This, of course, made the legislators so popular with school boards and superintendents, they promptly ended up in court. The rebates were not returned, as school districts hoped to use them as a cushion against revenue freezes for next year.

There was a major restructuring of special education funding that went with the additional funding ($128mm-included overdue payments). Pennsylvania had been out front in special education funding legislation back in the seventies. It was the PARC (Pennsylvania Association of Retarded Citizens) suit that fueled action at the federal level resulting in Act 94-142. Pennsylvania's funding was straight excess costs. By the mid-eighties, forty percent of children in school were classified with disabilities. The 1991-92 budget moved to a formula and disconnected special education funding both from excess costs and from the intermediate units that had provided many of the services. The purpose was to put a lid on identification and to allow districts more competitive opportunities. By April, 1992 there had been a one percent decrease in the number of children identified, most of them receiving speech services. The state gave transportation a 25% increase which helped out rural schools and special education. PARSS (PA Association of Rural and Small Schools) has an equity suit pending in the state courts.

The state also sought relief by lowering its pension fund contribution rate from 19.1 to 14.24%. How clever of them to lower the contribution rate just in time for substantially lower interest rates. In total, state contributions to local districts increased by about $400 million.

*Education is being slowly eased out of growth by fast growing Medicare costs.* The state added an extra $415 million to medical assistance. Inpatient payments accounted for $191 million, most of it going to hospitals, a 42% increase. Outpatient payments increased by $55 million, Medicaid capitation by
$74.7 million and nursing homes by $42.8 million.

In other areas, county child welfare programs increased by 30% to $58mm. This increase resulted from a fair share lawsuit brought by the counties against the state for federally mandated programs. The counties also received increases of $27 million for mental health and mental retardation services, a six percent increase, and $27 million for the health services development fund.

In short, the state is continuing to invest its economic, social and ecological future in basic and special education, welfare and health services for the indigent, crime control, interest payments and administration.

GOVERNOR’S BUDGET: 1992-93

The revenue news isn’t good; the recession still dwells in Pennsylvania. The expenditure news isn’t good either because, of course, demand for public services has increased. The income tax surcharge will be rolled back from 3.1 to 2.8% in August, despite the bad news at the Revenue Department. Included in the rollback is a .25 mill decrease in the capital stock tax. The $14.2 billion budget is only 1.4% over current levels.

Funds are been shifted out of education growth and into medical assistance (up $200mm) and corrections (up $48.3mm). The budget calls for freezes in most of basic education and cuts in higher education. Hardest hit are voucher subsidies to private colleges and universities ($76.1 mm). The big three universities (Penn State, Pitt and Temple) and Lincoln (traditionally African-American) are scheduled for $24.5 million in cuts. Scandals over excessive spending on presidents at the University of Pittsburgh did little to engender support from the legislature. In addition, the state’s university system of fourteen institutions is scheduled for a $13.7 million decrease. The small community college system faces a $7.9 million cut.
In basic education, the subsidy formula's flat per capita FEE (Factor for Educational Expense) is scheduled to rise $105 to $2655. It would take about $130 million in new revenues to fund it, an unlikely scenario. It is estimated that a freeze would reduce the state's share of instructional expenses to below 37%. Freezes in subsidies to basic education will shift costs back to the local level, where many poorer districts face serious financial difficulty just trying to keep up with fringe benefit rates. Other districts that bargained as though the economic expansion would last forever face tough decisions as they scramble to meet those contractual obligations in the face of a freeze. The trick of balancing budgets by reducing pension fund contributions continues. This year the governor proposed to reduce the employers' rates be from 14.24 to 12.39%. This would reduce the contribution rate by one third in less than two years, a disturbing trend and unlikely to pass. In 1990-91, the state contributed $564 million to the school retirement fund. In 1992-92, that is expected to drop to $480 million. For 1992-93, the budget reduces it to $455 million.

Special education substantially beats inflation for yet another year. A seven percent increase of $35.5mm has been requested, bring the state's contribution to $543.5mm or a 30% increase over two years. The formula would allocate $481mm outside the ESBE formula. The special education formula is driven by ADM and not weighted by aid ratios. There are two parts to the formula: a) (District A's ADM x 15% x $1000) and b) (District A's ADM x 1% x $12,225).

In addition, $30 million pays for services in state schools or hospitals; $27 million would be set aside for core services in intermediate units; and $5.4 million would be set aside for a contingency fund. Other special education funds include $76 million for approved private schools, a thirty percent increase over two years; $36.3 million for those in child welfare; and $9 million for instructional support teams for a grand total of $664.8 million. Trouble could be brewing as special education lobbyists encounter equity issues. To what extent have wealthier suburban districts
beneftted from special education as a vehicle for receiving subsidies outside the ESBE formula?

TUITION VOUCHERS FOR NONPUBLIC SCHOOLS

Just when the legislature thought it could lay low and recover from the tax increase, tuition voucher plans were introduced by Joseph Pitts, Stephen Freind, Gerald Kosinski and fifty other sponsors in the House. In the Senate, major backers were Anthony Andrezeski and Frank Salvatore. On November 26, the Senate voted 28-22 to pass SB-953 with tuition voucher language. It provided two basic subsidies. First, children attending public school outside the home district would have their state subsidy follow. Second, the bill would have provided up to $900 in tuition vouchers for those attending public or nonpublic schools outside their district. HB-1133 was sponsored by a new coalition of: a) conservative business interests, particularly the Commonwealth Foundation; b) the Catholic Conference; and c) African-American professionals, primarily from Philadelphia. It turned into another mean fight that will spill over into the next election's campaign fund raising. One state wag claimed that the voucher people had the votes, but the teachers' unions had the campaign contributions. The bill was obliquely defeated on December 11, when the House voted 114 to 89 to declare the voucher language unconstitutional as written.

Prior to the bill's introduction, the professional groups representing educational interests utterly stonewalled any discussion of school choice. Within two months, those same groups were promoting school choice within the public school system. What happened? Some observers claimed they finally started to realize that public education no longer enjoyed the support it once had. The tuition voucher plan may have failed more because of a lack of state revenue than a lack of political will. It may have been beaten back because it: a) was made into a Catholic issue; b) divided the African-American community; and c) had high startup costs. Opponents claimed the tuition vouchers to nonpublic schools would cost an extra $300 million in the first year, much of it
headed toward Philadelphia and surrounding suburbs.\footnote{3}

The future is uncertain, and much of it will depend on the economy. Most admit the issue is not likely to disappear in the near future. A public choice bill is likely to be introduced in the fall. Pennsylvania is a state that has aged more rapidly than most. Are we seeing a withdrawal of public support for education by the elderly worried about health care? Is this disenchantment likely to affect reform in the state or elsewhere? Perhaps. Many of the less visible supporters of the vouchers were elderly citizens concerned about rising local school property taxes.

For more information about Pennsylvania's tuition voucher legislation contact Barb Rudiak at 73 Keswick Avenue, Pittsburgh, PA 15202.

**BINDING ARBITRATION**

Taxpayer resistance to rising teacher salaries and fringe benefits has been mounting. Recent binding arbitrations in the center of the state led to no gains for teachers. In two recent arbitrations, districts focused on the lack of growth in the revenue base and in taxpayer's purchasing power, rather than on cross-district comparisons. For example, in Bellwood-Antis School District, teacher salaries increased over seven percent each year since 1988-89. That did not include increases for rapidly rising health care insurance. During that same time, on the other hand, the real estate tax base in the district grew only about two percent per year. Earned income growth was even lower. According to a district demographic study, more than 15% of the district's population was over 65. Social Security increases were less than one half those of teachers in 1990-91. The same study showed that teacher supply and demand was highly localized. Most full-time teachers (84.21%) lived in the same county. All but one teacher attended high school in Pennsylvania, with 60% attending high school in the county where they now taught. When adjacent counties were added in, it rose to almost 80%. Similar conclusions were reached in a
second study of a wealthier school district, Hollidaysburg Area. This raised questions about teacher labor markets. If school districts draw on local people who went to local colleges, how can they justify widely disparate salaries across districts in the same county?

For further information, contact David Davare, Research Director, Pennsylvania School Boards Association, 774 Limekiln Road, New Cumberland, PA 16601 (717) 774-2331.

EQUITY: TIED TO REGIONAL WORKFORCE

A regional study of tax bases showed wide disparities in wealth in neighboring school districts. Wealth gaps appeared to be as wide within regions as across them. This raises policy concerns for the state. What possible interest would the state have in subsidizing wealth gaps created by political zoning practices and local incorporation choices, especially if these artificial boundaries do not contribute to regional workforce quality and economic development? The state has an interest in helping poorer regions making concerted efforts to keep property assessments fair and up to date, especially if they show tax effort. It may not have much interest in subsidizing wealth disparities within regional labor markets. Local districts will be increasingly pressed to show how they contribute to regional workforce excellence. Counties with wide wealth disparities in schools may impede, rather than contribute to regional workforce excellence.

EQUITY POLICY ISSUES

Those concerned about educational equity and regional economic development for global competition will need to consider the following four issues: a) assessment reform; b) tax pooling; c) tuition and fees and d) benefit pooling. Educational inequality is closely linked to tax inequities. Pennsylvania's assessment system is a national embarrassment; it is one of fewer than five states to remain unregulated. The state may be inadvertently subsidizing disincentives for fair county...
assessments. Reassessments may result in lowered aid ratios and reduced subsidies. Some wealthy counties have not reassessed in decades, making them look poorer than they are. The state's equalizing system (STEB) is equally obsolete. School finance equity that is not tied to tax equity cannot succeed. Even a fairer system of tax assessments and collections, however, cannot deal with the terrible inequities created by school districts next door to each other. Counties and intermediate units with highly unequal systems may be impeding regional workforce excellence by systematically encouraging overinvestment in some of its future workforce and underinvestment in others. Pennsylvania's greatest weakness, its highly localized inequities, is also its greatest strength - local control. Instead of merging districts at a county or IU level in order to equalize the injustice, it might be far better to pool and share regionally those taxes that most contribute to regional economic development: commercial and industrial property, real estate transfer, income from commerce and capital gains. Over the longer term, Pennsylvanians may have to face difficult decisions about how to invest their public resources. Sure the state gives proportionately more money to poorer districts than to rich ones, but not that much more. According to the state's measure of relative local wealth, the aid ratio, state aid to districts in the Pittsburgh area between 1982-83 and 1989-90 should have decreased by 16.6% for rich districts; b) increased by 7.6% for middle districts; and c) increased by 11.9% for poor districts. The state instead was more generous but less equitable. State revenues during that period increased, in constant dollars, by 11.3% for the rich; 25.3% for the middle; and "only" 28.6% for the poor. Middle districts were treated almost as well as poor ones, even though their local tax bases were quite different. During the same period local revenues, in constant dollars, grew by 26.9% for the rich; 12.8% for the middle; and only .9% for the poor. The state may be inadvertently subsidizing zoning, not children. People who believe that their property is worth more than the children in the neighboring district may have the right to protect their property values, but not at state expense. Some districts may grow wealthier faster
than others because they use zoning to enhance the value of their homes. The state may not be pleased with the "ignoble preferences" of some citizens, but to some extent, it is part of the price of liberty. On the other hand, the state should not encourage these ignoble zoning preferences by subsidizing them. Communities that chose to invest in exclusion should have the right to pay tuition to cover the loss of state subsidy.

Finally, a large share of the inequality of available revenues falls to teacher compensation. A regional study in the Pittsburgh area discovered that new teachers were hired from roughly the same pool of local graduates who had attended the closest, cheapest colleges. This means that one Slippery Rock graduate might teach next door to a classmate for twenty years, earning thousands of dollars less, not because of the difference in the quality of teachers, but because of differences in the revenues of districts. Do these differences mean that poorer districts are more efficient than rich ones because they "buy" comparable quality at lower prices? Teacher quality is as much a regional issue as a local one; therefore benefit pooling at the county or intermediate unit level might help create fairer, more competitive regional labor markets for teachers.

FACILITIES CONDITIONS

A recent report estimates that Pennsylvania severely lags other large states in state spending for capital outlay. This will be a growing problem over the next decade as the building boom of the sixties and early seventies faces major renovations. In addition, the state faces many buildings that are growing too old to repair. Pennsylvania is near the top in terms of interest paid on school debt, but near the bottom in capital outlay. Compare the following states in terms of capital outlay: CA ($4.8b), FL ($1.8b), NY ($1.4b), TX ($1.4b), OH ($1b), IL ($1.5b), IN ($1.5b), PA ($1.2b), LA ($1.2b), NJ ($1b). Beleaguered Michigan, a smaller state on harder times, is estimated to spend three times more than PA on capital outlay, ($1.6b). PA is closer to Louisiana than to most
other "rust belt" states except New Jersey. Are today's budgets being balanced at tomorrow's expense?
ENDNOTES


2. Data for this section are drawn from the PASA Flyer, published monthly by the Pennsylvania Association of School Administrators, 801 North Second Street, Harrisburg, PA 17102 (717) 232-9996.


Introduction

The murky, gray veil of unconstitutionality shrouds the arena of Texas school finance. The state's Supreme Court ruled in January, for the third time, that the system did not meet constitutional standards. Under litigation in federal court, a class action suit seeks elimination of taxing under the current system. Faced with the state court's mandate to restructure the system and with federal court intervention in school finance for the first time since Rodriguez in 1973, Texas legislators prepare for an expected bitter special session in May. With several proposals already submitted, some predict the most heated debates since the framers of the state's educational package battled during the Constitutional Convention of 1875. After over a month of wrangling, members of that convention finally agreed that a general diffusion of knowledge was essential to preserving liberties and rights of people and, therefore, it was the duty of the Legislature to establish and make provision for the support and maintenance of an efficient system of public free schools (Constitution of Texas, Article VII, Section 1). On the word efficient hinges much of the clamor for equity in school finance today. Indeed, in the first Edgewood v. Kirby (1989), the Texas Supreme Court held that the state's school finance system was neither financially efficient nor was it efficient in providing for a general diffusion of knowledge and, therefore,
unconstitutional.

In explaining its decision, the court stated that a direct and close correlation must be present between a district’s tax effort and the educational resources available to it. Similar levels of tax effort must provide substantially similar revenues per pupil in each district. The court stated that efficiency did not require a per capita distribution, but it did not allow for concentrations of resources in property rich school districts that tax low when property poor districts had to tax high and still could not generate enough revenues to meet minimum standards. The court wanted children who lived in poor districts and children who lived in wealthy districts to have substantially equal opportunity for access to educational funds.

After a new finance plan was implemented by Senate Bill 1 (1990), the Texas Supreme Court again heard from property poor districts on appeal from lower courts (Edgewood v. Kirby, 1991). It found that the new plan left essentially the same funding system intact as well as the same deficiencies. The court stated that the basic flaw of SB 1 was not in any particular provisions of the law but in the law’s failure to restructure the finance system. The court further stated that an attempt to fine tune the system in place would not create an efficient educational system. The Legislature must create a substantially new plan.

The Texas Supreme Court was unanimous in its decisions on Edgewood I and Edgewood II. That unanimity would not last. In an opinion on a motion for rehearing called Edgewood II 1/2, the court heard arguments that local districts were creatures of the state and, therefore, local property revenue became a state tax and could be used to fund
other districts. Although denying that argument, the court split on its response. Chief Justice Thomas Phillips added to the finding that when the Legislature provided an efficient system which was in compliance with VII-1, it could authorize districts to supplement educational resources if local property owners approved an additional local property tax and as long as efficiency was maintained. Justice Raul Gonzalez argued that the court should not interfere with ongoing legislative debate or get into the arena of giving the legislature pre-clearance on proposed legislation. Justice Bob Gammage called the Phillips statement unnecessary and improper and urged the court to narrowly confine itself to the question presented. Justice Lloyd Doggett wrote more vehemently. Doggett condemned the court for expounding on social policy preferences rather than resolving a motion, pointing out that the court’s function was neither to draft legislation nor to render advisory opinions. The break in unanimity would continue through Edgewood III.

Still seeking a solution the school finance system’s unconstitutionality, the Legislature enacted Senate Bill 351, amended by House Bill 2885. Although the bill retained the state’s historical reliance on local ad valorem taxes to fund most of the cost of education, SB 351 created 188 county education districts (CEDs) in an effort to relieve disparities among school districts due to local property wealth. The CEDs performed no educational duties; they had only tax functions. When the Supreme Court heard the most recent challenge of the finance system, Carrollton-Farmers Branch v. Edgewood (1992), the court wrote that CEDs did not set their own tax rates—the rate was set by statute. The CEDs’ sole role was to levy, collect, and distribute property taxes as directed by the legislature. Carrollton-Farmers Branch et al argued that SB 351 was unconstitutional in
that it levied a state ad valorem tax without voter approval. The court found the argument valid and again declared the state’s school finance system unconstitutional. However, the court allowed the system to remain in effect through the 1992-93 school year. Claiming that because the state’s Supreme Court had ruled the tax unconstitutional and that due process had been violated, a class action suit was filed in federal court to remove the tax immediately.

The Edgewood cases highlighted four issues (Kemerer, 1992). First, the litigation highlights the role of judges as policymakers. Kemerer states that the trial judge became a potential architect of the school finance system through involvement in the remedy phase. Possible drawbacks include legislative buckpassing and an erosion of respect for the judicial branch as its political role becomes exposed. Second, legislative incapacity to address minority social problems is evident as self-interest on the part of individual legislators in reelection takes precedence over social responsibility. The political powerless must then turn to the courts for relief from unconstitutional conditions. The court’s belief in the Constitution as an organic, rather than a static, document is the third issue. As the court seeks to maintain the intent of the framers in their original definitions of such things as efficiency, it must reinterpret the document in light of modern conditions. Finally, the role of values in judicial decision making has been brought to light as judges have been forced to reveal their value preferences in light of local enrichment concerns in Edgewood III. The elected judges feel the political influence as conservatives and liberals express their views.

Texas school finance has not always been muddled. A brief look at history provides
a framework for understanding the current crisis as well as providing important information for the proposal of new educational finance policies.

**Brief History of Texas School Finance**

Texas school finance dates to 1824 when the newly adopted constitution of Mexico, whose flag Texas flew at the time, left responsibility for education of the nation’s citizens to each respective state. In response, the State of Coahuila Texas made provision for education through land grants and municipal funds in 1827 and again in 1836 (Watson, 1991).

When Texas became a nation, the Article of Government adopted in 1836, included a provision for public education. The Education Act of 1839 stipulated that each county of the new republic set apart three leagues (approximately 13,284 acres) of land for the purpose of establishing a primary school or academy in that county. In 1840, the Texas Congress added another league (making a total of approximately 17,712 acres) to the area set apart for the endowment of a school. However, there exists no record that any county actually used the endowment to start its own school.

When Texas became a part of the United States of America in 1845, the constitution adopted included a section which provided for the establishment of free schools throughout the state and support by taxation and property. Although lawmakers appropriated 10% of the state property tax to education each year after 1848, these funds were never disbursed.

By the early 1850's, a growing sentiment was felt across the state for a public school
system to be developed. When the Compromise of 1850 brought $10 million into the coffers of the state (settling a land dispute between the United States and Texas), $2 million remained after paying off the indebtedness of the state. That amount to established the Permanent Endowment Fund in 1854. Revenue from the fund was to be distributed annually on a per capita basis for public school education. In 1856, the state's first voucher system was established, allowing any group of citizens to establish a school and draw the state's per capita funds from the Permanent Endowment Fund (Parker, 1991).

During the Civil War, the Permanent Endowment Fund disappeared, a victim of transferring funds to support the war effort and to railroad concerns. Per capita distribution ceased as early as 1861, and by the end of the war practically nothing was left in the coffers.

As radical reformation took place during the Reconstruction, the system of public education began to re-emerge. Those in power, mostly Northerners, brought their strong belief in public education. The Constitution of 1869 afforded the governor and the state school superintendent broad latitude in education affairs. Among the major decisions made were the revival of the Permanent School Fund, an increase in state taxes for education, compulsory school attendance, and the establishment of the first statewide system of local taxation for schools. These moves were strongly resisted by most Texans primarily because the government in power consisted mostly of Northerners.

When the Constitutional Convention of 1875 was called, delegates fought for 27 days before becoming stalemated on the education issue. A select committee was formed to develop a compromise. After five days of bitter debate, a report was brought forward.
Not until the 54th day of the convention did the education section pass. Two issues dominated the debate on the education issue—taxes and who would control education. Whether to have private funding and private control, public funding and public control, or a combination of both remained at the forefront of the debates. In the end, the constitution eliminated all state, county, and district supervision and placed control entirely with parents and local communities (Parker, 1991).

When a new constitution was adopted in 1876, an Available School Fund was established with earnings from the Permanent School Fund (PSF). The PSF became a perpetual endowment consisting of all funds previously allocated and half the public domain—approximately $25 million. A maximum of one-fourth of the state’s general revenue and a portion of the state’s dog tax was allocated to public education. With minor exceptions, from 1876 to 1915, the flat grant monies from the Available School Fund provided the sole state contribution to local schools.

Voters approved an amendment in 1883 authorizing a state ad valorem tax and local taxation by school districts, providing for local support of school districts. By the turn of the century, massive inequities developed in the amount of funds available in different districts, especially between urban and rural districts. Tax limits for municipal districts were limited to $0.50 per $100 valuation while the common school districts were limited to only $0.20 per $100. Municipal districts could vote bonds; common schools could not. Rural schools spent less than $5.00 per pupil over an average school term of 98 days. In urban areas, comparable figures were $8.35 and 162 days.

After the turn of the century, the PSF began to be invested in construction bonds
for independent school districts. By 1904, there were 381 independent (mostly city) districts and over 7,000 common (mostly rural) school districts. In 1908, a constitutional amendment equalized the tax limits and allowed common school districts to vote bonds. County boards of education were created in 1911. More aid was pumped into rural schools as the Legislature appropriated $1 million in 1915 as more equity between the independent school districts and the common school districts became an issue.

The Legislature proposed and the voters adopted a constitutional amendment in 1918 which provided for free textbooks to all public school students. Constitutional tax limits on school districts were abolished in 1920, with the legislature becoming responsible for setting the limits imposed on districts. School finance became a quiet issue for almost 30 years with most state funds being distributed to local districts on per capita basis. Not until the Gilmer-Aiken Bill in 1949 was there another significant incident in the history of the state’s school finance program.

With the Gilmer-Aiken Bill, a minimum foundation program was established. Formulas were used to determine the cost of education in each school district. Local districts provided a portion of the needed funding; the state provided the difference. Local school districts were given the option of enriching the educational program above the capabilities of the minimum foundation program. An elective state board of education was established and, for the first time, a state salary schedule for teachers was established.

Finance issues were again quiet for over 20 years before a U. S. district court ruled the state’s financial system unconstitutional in Rodriguez v. San Antonio ISD (1971). Although the U.S. Supreme Court overturned the decision in 1972, the stage was set for
continued litigation over the equity of school finance. As a result of the decision, the Legislature began to pour more of the state’s educational dollars into poor school districts over the next 10 years.

House Bill 72 (1984) established a significant new trend in school finance. Texas changed its funding patterns from guaranteeing services to guaranteeing dollars. The basic distribution unit changed from adjusted personnel units to a weighted pupil unit formula. In the Foundation School Program, a basic allotment amount per average daily attendance was set at $1,290 for 1984-85 and $1,350 in succeeding years. A Price Differential Index (PDI) index was instituted, special categories using the weighted pupil index established, the linear density formula for transportation funding retained, an experienced teacher allotment included, an enrichment equalization allotment established for districts which were less than 110% of the state average property value per student, and three new programs (full year kindergarten, summer bilingual programs, and maximum class sizes for grades K-4) were established.

Poor school districts brought suit and in April, 1987, state district Judge Harley Clark ruled that the Texas school finance system was unconstitutional. In December, 1988, the Texas Third Court of Appeals overturned Clark’s ruling, but the state’s Supreme Court reversed the Appeals Court and on October 2, 1989, the school finance system was ruled unconstitutional and the Legislature given until May, 1990, to create an equitable finance system. Later, an extension was given.

On June 5, 1990, the Legislature adopted its new school finance plan, and the plaintiffs immediately appealed to Clark’s replacement on the bench, Judge Scott...
McCowan. In September, McCowan ruled the plan unconstitutional. The Texas Supreme Court upheld that decision in January, 1991. The Legislature introduced its current finance plan later that spring with wealthy districts challenging its constitutionality. In August, McCowan ruled in favor of the plan, but the Texas Supreme Court reversed that decision in January 1992.

Models of Equalization of Finance Resources

Four basic models for equalization of state finance resources have been embraced this century for public schools. The Foundation Program was designed to emphasize minimum tax rate effort and a guaranteed expenditure level. The Guaranteed Tax Base theory, on the other hand, focuses on the level of guaranteed valuation. Under the Percentage Equalizing system, the state's share of costs is the focus. The District Power Equalization model centers on tax effort factors. Each model has been shown to have its strengths (Walker, 1991).

Developed at Columbia University by George Strayer, Robert Haig, and Paul Mort, the Foundation Program continues to be the most universally used model for school finance equity in the United States. This model seeks to provide equalization of educational expenditures at a uniform level, to provide for a separation of the decision-making authority of the state and local school districts, to provide statewide minimum local and state spending patterns, and to ensure continual improvement of the educational system by defining and redefining the foundation level. In essence, it is designed to provide an established minimum revenue level in districts without placing an undue burden
on taxpayers (Strayer and Haig, 1923).

The Guaranteed Tax Base (GTB) model provides for each district at or below the GTB level equal access to revenues at equal tax effort. The state provides support for a designated percentage of costs for any given district based on actual district wealth. More state aid flows to low wealth districts than to high wealth districts. The GTB model emphasizes local control and local choice in spending. Expenditure equality is not a goal of the model and disparities may occur in per pupil expenditure as effort varies. The goal of the GTB model is a 1:1 correspondence between tax effort and tax yield. Under this plan, efficiency and minimum adequacy are called into question as the state does not confront the issue of quality performance in all districts (Walker, 1991).

Updegraff and King (1926) developed the principles of Percentage Equalization, based on variable ratio matching of local expenditures, to spotlight the spending side of equity rather than taxation. Although the plan declined in popularity due to the fact that it emphasized spending effort rather than tax effort, Mort used the model to develop a second tier to the Foundation Program model, having the state matching rate based on the state and local ratio in the Foundation Program basic aid calculations. When Texas decided to provide state equalization aid in 1975, the new Mort model was used. In 1989, the state abandoned the program at the second tier level for the power equalization model.

Coons, Clure, and Sugarman (1970) popularized the District Power Equalization model which was based on the principles developed by Updegraff (1919). Recapture provides a guaranteed number of dollars per pupil per one cent tax. The goal of power equalization is again a 1:1 correspondence between tax effort and tax yield, not equality of
expenditures. The state attempts to recapture from rich districts in an effort to decrease the gap between those districts and poor districts as it cannot afford unlimited matching funds to the poor districts.

Current System

Senate Bill 351, passed in May, 1991, and declared unconstitutional in January, provides the current method of school finance in Texas. Under the bill, the Foundation School Program (FSP) seeks to achieve equity on two tiers. Tier I provides for a form of percentage equalization, while Tier II has power equalization as its primary thrust. Local districts may provide additional enrichment above Tier II by local districts. During the current academic year, the state guarantees $2,200 per weighted pupil under Tier I, plus additional entitlements, and requires an effective tax rate from each County Education District (CED) of $0.72 per $100 valuation of property. Tier II guarantees $21.50 per weighted pupil per penny of tax that a district levies to a maximum of $0.45 above the Tier I tax rate. If the amount of revenue collected amounts to less than that amount, the state makes up the difference. If the amount of revenue collected amounts to more than that amount, the district is allowed to keep all of the revenue. Currently, a district must levy a total effective tax rate of $1.17 to receive full benefit of state aid. Districts may charge up to a maximum of $1.53 per $100 of valuation and keep all revenue above the $0.72 rate but the state does not participate above the $1.17 rate (Watson, 1991).

Possible Alternatives
When Governor Ann Richards calls the legislature into special session, which is expected to happen in May, the lawmakers will be sifting through a variety of proposals for creating a constitutional plan for providing equitable funding for school districts in Texas. Current alternatives run the gamut from mammoth consolidation of schools to restructuring the tax package to legalizing the current system through a constitutional amendment. In a unique twist, the state's superintendents of schools have been invited to provide critical input to legislators as the state leaders decide the future of Texas school finance.

One proposal involves the legalization of the current state system, which was ruled unconstitutional in January by the Texas Supreme Court. The current system, which allows the newly created county education districts to balance funding between property poor and property wealthy school districts within its boundaries, would become constitutional if an amendment passed by the state's voters authorizing the CED's to collect property taxes for schools.

Another proposal which has been endorsed by several Republican legislators, would restrict the power of the courts to view lawsuits which relate to Texas school finance. Although the amendment has gained credence among several legislators who are at odds with the courts over the unconstitutionality rulings, much opposition to the proposal is evident among districts, especially the property poor districts which were involved with the original Edgewood v. Kirby (1989). The proposal would end the current litigation over school finance by giving the Legislature sole responsibility and discretion for determining the school finance package for the public schools of Texas.
Yet another proposal would require districts to pool resources generated by above-minimum taxation effort with districts who also tax above the minimum. The self-equalization system would require each district to set property tax rates at a minimum level. Additional money could be generated by any district by raising its tax rate. However, any revenues above the basic tax effort would be pooled with other districts which tax at the same rate.

A call for full state funding of public schools has also been heard. Under the proposal, most revenue for public schools would be allocated by the state as local property taxes are reduced. To accomplish this proposal, legislators would be required to create a state income tax or a value-added tax on manufactured goods in order to produce enough revenue for a state-funded system. Opposition abounds for each form of tax.

Under another proposal, a statewide property tax would replace local property taxes for school districts. Based on student enrollment, districts would be apportioned revenues on a per pupil ratio. Local school district would have the option to set a tax rate above the statewide rate set by the Legislature in order to raise additional funds.

In an effort to recapture monies raised in wealthy school districts, the state could require a portion of property tax revenues collected in those districts to be sent to the state to be distributed to poor school districts. Under this plan using state resources and local property taxes, each district would be entitled to an equal level of basic funding. This concept, which is being supported by the Equity Center (an organization whose membership includes over 300 of the state’s lowest wealth school districts).

The state’s governor and several key business groups are recommending to the
Legislature a plan in which businesses (including utilities, minerals, gas, and oil) would not be taxed by local school districts. The businesses would, however, be faced with a new property tax imposed by the state. Local school boards would continue to set tax rates, collected locally, on all residential property. Revenues from the state's property tax on businesses would be apportioned equally to districts on a per pupil ratio.

The Speaker of the House of Representatives of Texas advocates a massive consolidation of state's 1,047 school districts into 188 larger school districts following primarily county lines. In sparsely populated areas, multicounty districts would be created. Proponents of this alternative point to a reduced cost for school administration as a way to save the state almost $500,000 dollars per year.

Another option which has been voiced is a county unit system similar to what is in place today. It is advocated that the county unit set a tax rate not to exceed $1.00 per $100 of assessed valuation and the state would be required to match the county revenue, a form of tax base sharing.

Opponents of each proposal have quickly pointed out that each system appears filled with flaws. None of the proposals suggested yet have fully addressed equal funding, equal facilities, and equal opportunities for students from all school districts. Most proposals have omissions which allow loopholes for wealthy districts to increase per student spending and student opportunities.

Whatever the Legislature adopts will most likely be brought before the voters in November as a constitutional amendment in an effort to head off further litigation. Otherwise, Texas school finance will continue to plow the murky waters of
unconstitutionality.

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INTRODUCTION

Virginia is currently plagued by a question as old as the Commonwealth itself: How to achieve equal educational opportunities for all school children? This goal was set forth in Thomas Jefferson's educational plan for Virginia in 1779 and is still illusive today, despite a continuing stream of studies, recommendations, and public pronouncements. On April 9, 1992, a coalition of 31 Virginia school districts took a critical step in the long struggle for equal educational opportunities by voting to sue the Commonwealth of Virginia over gaps in quality and equality in education financing of elementary and secondary schools. This paper briefly highlights the history of the litigation, reviews research on fiscal equity in Virginia, and provides a listing of state documents and studies related to elementary and secondary finance for further study.

HISTORY OF RECENT LITIGATION

The history of finance litigation in Virginia is brief, although the record of fiscal inequity for public school children, studies documenting disparities, commissions expressing concern and public pronouncements indicating a need to correct the problem, date back to the time of Thomas Jefferson. Over the last ten years attention to closing the gap between the best and the worst financed school has proceeded more vigorously although corrective
legislative or gubernatorial action has not been forth-coming.

On April 19, 1991 the Coalition for Equity in Educational Funding – a coalition of poor school districts in Virginia – voted to file suit against the State of Virginia unless by September 13, 1991 the governor announced recommendations to the General Assembly that would provide a detailed blueprint for the elimination of disparities in educational funding. When the governor did not announce such a blueprint, the steering committee of the coalition voted on September 17, 1991 to file the lawsuit.

On November 20, 1991 the plaintiffs filed the bill of complaint, Allegheny Highlands et al vs. the Commonwealth of Virginia et al but the complaint was not served allowing the governor and General Assembly to make a good faith effort to resolve the disparities during the 1992 General Assembly. The suit, filed on behalf of 31 local school boards, names as defendants Mary Sue Terry, Attorney General of Virginia, Suzanne C.F. Thomas, President, Board of Education, James W. Dyke, Jr., Secretary of Education, and Joseph A. Spagnolo, Jr., Superintendent of Public Instruction.

The complaint asked the court for a judgment declaring that the current system of funding public elementary and secondary schools within the Commonwealth of Virginia violates the Constitution of Virginia by denying children who attend public school in the

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1 Allegheny Highlands County Board, et al. v. Commonwealth of Virginia et al. Circuit Court for the City of Richmond, Chancery No. HB-1209-1.

2 According to the Washington Post: "Not serving the papers could remove one excuse for inaction, suggested earlier by [Governor] Wilder and some lawmakers: that legislators cannot act on a matter that is the subject of litigations, a policy that has been invoked selectively in the past."
school divisions of the complainant school boards an educational opportunity substantially equal to that of children who attend public school in wealthier divisions. According to Virginia's Constitution:

... free government rests, as does all progress, upon the broadest possible diffusion of knowledge, and that the Commonwealth should avail itself of those talents which nature has sown so liberally among its people by assuring the opportunity for their fullest development by an effective system of education throughout the Commonwealth. (Article I, Section 15).

The General Assembly shall provide for a system of free public elementary and secondary schools for all children of school age throughout the Commonwealth, and shall seek to ensure that an educational program of high quality is established and continually maintained. (Article VIII, Section 1).

In response to the filing of the complaint, defendants appeared voluntarily and waived process, e.g. their right to be served. It was subsequently determined that the defendants did have the right to waive service as the object of service was notification which was present. The defendants then filed a demurrer. On January 3, 1992 plaintiffs responded by filing a nonsuit effectively dismissing the cause "without prejudice". On April 9, 1991 after reviewing legislative changes enacted in the General Assembly, plaintiffs voted to refile the complaint.

EDUCATIONAL DISPARITIES

Numerous recent studies have been completed in Virginia documenting disparities in education financing. In a recent study examining fiscal disparity in Virginia using 15

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statistical measures, it was found that since restructuring the school aid formula in the 1988 General Assembly: 1) the gap in revenue between more and less affluent localities has grown larger; 2) poorer school divisions have grown poorer and rich school divisions, richer; 3) the linkage between local ability to pay for education, i.e., wealth, has strengthened. In 1990, poor school systems had $4,330 per pupil less than affluent school systems. This equates to a difference of $110,000 per class of 25, or a difference of $21 million for each school of 500.

The erosion of state education aid has encompassed a growing circle of Virginia's school children. In 1990, 70 percent (70%) of Virginia's school divisions had less money (in real terms) than they did in 1988. The linkage between local wealth and education revenue was .81 in 1988; it was .85 in 1990.

Disparities related to educational programs, pupils and finances in Virginia include: differences between localities, correlated to the wealth of a locality, in the availability of elementary specialists in art, health, language arts, mathematics, music, physical education, science and social studies; elementary staffing ratios; student performance. According to "A Plan to Improve the Educational Opportunities of All Virginians":

... the issue of funding, or fiscal equity cannot be separated from program or pupil equity. The differences in per pupil expenditures among the poorest and wealthiest divisions mean less resources in the form of teachers, specialists, instructional materials.

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75

82
technology and physical facilities are available to students in the poorer divisions.6

### TABLE 1

<table>
<thead>
<tr>
<th>EQUITY STATISTICS FOR VIRGINIA SCHOOL FINANCE UNDER CURRENT &amp; PRIOR LAW</th>
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<tbody>
<tr>
<td>MEASURE</td>
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<tr>
<td>Range</td>
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<tr>
<td>Nominal</td>
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<td>Adjusted a/</td>
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<td>E8</td>
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<td>E10</td>
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a/ 1987 = 100%
N= 968,143 (1987-88); 973,987 (1989-90)

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<tr>
<td>0%</td>
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<td>10</td>
<td>2,809</td>
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<tr>
<td>100</td>
<td>6,498</td>
<td>1.25</td>
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a/ Fairfax City-County ranged from the upper 80th to mid-90th percentile, thus, no observation was noted for the 90th percentile.

<table>
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<tr>
<th>Measure</th>
<th>Prior Law 1987-88</th>
<th>Current Law 1989-90</th>
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<tr>
<td>WEALTH-Local Composite Index (LCI)</td>
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</tr>
<tr>
<td>Correlation (r)</td>
<td>0.81</td>
<td>0.85</td>
</tr>
<tr>
<td>Regression (r squared)</td>
<td>0.70</td>
<td>0.71</td>
</tr>
<tr>
<td>Slope</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Elasticity</td>
<td>N.A.</td>
<td>N.A.</td>
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<tr>
<td>F-Ratio</td>
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<td>330</td>
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<tr>
<td>Probability</td>
<td>p = 0.0001</td>
<td>p = 0.0001</td>
</tr>
<tr>
<td>WEALTH-AVG.RATE TAX APPROACH (ATRA)</td>
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<td></td>
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<tr>
<td>Correlation (r)</td>
<td>0.70</td>
<td>0.71</td>
</tr>
<tr>
<td>Regression</td>
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<td>0.50</td>
</tr>
<tr>
<td>Slope</td>
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<td>0.60</td>
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<tr>
<td>Elasticity</td>
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<td>0.45</td>
</tr>
<tr>
<td>F-Ratio</td>
<td>127</td>
<td>132</td>
</tr>
<tr>
<td>Probability</td>
<td>p = 0.0001</td>
<td>p = 0.0001</td>
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</table>

a/ N = 968, 143 (1987-88); 973,987 (1989-90)
N.A. - Not Applicable
Virginia is currently plagued by a question as sold as the Commonwealth itself: How to achieve equal educational opportunities for all children and all schools? This goal was set forth in Thomas Jefferson’s educational plan for Virginia in 1779 and is still illusive today, despite a continuing stream of studies, recommendations, and public pronouncements.

On April 9, 1992 a coalition of about 31 school districts in Virginia took a critical step in this long struggle for equal educational opportunities: it voted to sue the Commonwealth of Virginia over alleged disparities in school finances.

This paper briefly highlights the history of the litigation, reviews current research on fiscal equity in Virginia, and provides a listing of state documents and studies related to Virginia elementary and secondary education finance for further information.

HISTORY

On April 19, 1991 the Coalition for Equity in Educational Funding voted to file suit against the state unless by September 13 the governor announced recommendations to the General Assembly that would provide a detailed blueprint for the elimination of disparities in educational funding. When the governor did not announce such a blueprint, the steering committee of the coalition voted on September 17 to file suit.
On November 20, 1991 the plaintiffs filed the bill of complaint, Reid Scott et al. vs. the Commonwealth of Virginia et al but the complaint was not served allowing the governor and General Assembly to make a good faith effort to resolve the disparities during the 1992 General Assembly. The suit, filed on behalf of 31 local school boards, named as defendants Mary Sue Terry, Attorney General of Virginia, Suzanne C.F. Thomas, President, Board of Education, James W. Dyke, Jr., Secretary of Education, and Joseph A. Spagnol, Jr., Superintendent of Public Instruction.

The complaint asked the court for a judgment declaring that the current system of funding public elementary and secondary schools within the Commonwealth of Virginia violates the Constitution of Virginia by denying children who attend public school in the school division of the complainant school boards an educational opportunity substantially equal to that of children who attend public school in wealthier divisions. This violates the Virginia Constitution which contains provisions for education in the Bill of Rights and the education article. The Bill of Rights of Virginia’s Constitution states:

1. Reid Scott, with Morgan Scott and Ericin Scott, infants, age 10, 8, and 6 respectively, sue by their parent and next friend Thomas R. Scott, Jr. and are residents of Buchanan County, in attendance at Buchanan County School Division.


3. According to the Washington Post: "Not serving the papers could remove one excuse for inaction, suggested earlier by [Governor] Wilder and some lawmakers: That legislators cannot act on a matter that is subject to litigations, a policy that has been invoked selectively in the past."

...That free government rests, as does all progress, upon the broadest possible diffusion of knowledge, and that the Commonwealth should avail itself of those talents which nature has sown so liberally among its people by assuring the opportunity for their fullest development by an effective system of education throughout the Commonwealth. (Article I, Section 15).

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The General Assembly shall provide for a system of free public elementary and secondary schools for all children of school age throughout the Commonwealth, and shall seek to ensure that an educational program of high quality is established and continually maintained. (Article VIII, Sec.1)

DEFENDANT RESPONSE

In response to the complaint, defendants appeared voluntarily and waived process, e.g., their right to be served. It was subsequently determined that the defendants did, in fact, have the right to waive serve – as the object of service was notification which was present. The defendants then filed a demurrer.

On January 3, 1992 plaintiffs responded by filing a nonsuit effectively dismissing the cause "without prejudice". This, in effect, allowed defendants their request for more time, and the legislative session to correct inequalities through the legislative process.

On April 9, after reviewing legislative changes enacted in the General Assembly and concluding that more needed to be accomplished, plaintiffs voted to refile the complaint.

EDUCATIONAL DISPARITIES

Disparities related to educational programs, pupils and finances in Virginia are various
and, according to "A Plan to Improve the Educational Opportunities of All Virginians"\(^5\) include: differences between localities, correlated to the wealth of a locality, in the availability of elementary specialists in art, health, language arts, mathematics, music, physical education, science and social studies; elementary staffing ratios; student performance. The document notes that disparities in funding and in programs and services are necessarily intertwined and dynamic:

"...the issue of funding, or fiscal equity cannot be separated from program or pupil equity. The differences in per pupil expenditures among the poorest and wealthiest divisions mean less resources in the form of teachers, specialists, instructional materials, technology and physical facilities are available to students in the poorer divisions."\(^6\)

This linkage is especially crucial when viewed in terms of fiscal inequities across the Commonwealth. For example, in a study examining fiscal disparity in Virginia\(^7\) using 15 statistical measures, it was found that since restructuring the school aid formula in the 1988 General Assembly: 1) the gap in revenues between more and less affluent localities has grown larger; 2) poorer school divisions have grown poorer and rich school divisions, richer; 3) the linkage between local ability to pay for education, i.e., wealth, has strengthened. In 1990, poor school systems had $4,330 per pupil less than affluent school systems. This equates to a difference of $110,000 per class of 25, or a difference of $21 million for each school of 500.

\(^{5}\) A Plan for Improving Educational Opportunities for All Virginians (1992, January). Richmond, VA: State Capitol, pp7ff, mimeo.


The erosion of state education aid has encompassed a growing circle of Virginia's school children. In 1990, 70 percent (70%) of Virginia's school divisions had less money (in real terms) than they did in 1988. The linkage between local wealth and education revenue was .81 in 1988; it was .85 in 1990.

VIRGINIA EDUCATION FINANCE: FURTHER READINGS


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INTRODUCTION

California's Supplemental Grant Program established a precedent that, if followed elsewhere, could dramatically change the way categorical grant funding is viewed. In traditional school finance formulas, districts receive general aid from the state for basic operations (Odden & Picus, 1992). In most states, categorical grants based on identifiable student needs, are also used to support local school district operations. Since 1990, under California's Supplemental Grant Program, districts are eligible for an additional categorical aid grant if they are low spending districts and if they receive below-average levels of other categorical funding from the state. The Supplemental Grants are inversely related to identified student needs.

The purpose of this paper is to provide the first analysis of this highly unusual grant program. Our goal is to identify the rationale for this program, ascertain whether or not the funds appropriated were used as intended by the Legislature, and consider alternative ways the state of California might use traditional intergovernmental grant theory to reach the same goals.

This paper begins with a History of the Supplemental Grant Program, including a brief
history of California school finance since 1971. The second section, The Nature of Supplemental Grants, describes how these grants are different from other categorical grants. The third section, The Distribution of Supplemental Grants, discusses the formula developed by the California State Department of Education for the distribution of Supplemental Grants, examines how the funds were distributed and shows what types of districts received grants. The fourth section, Use of Supplemental Grants, describes how recipient districts used their Supplemental Grants. The fifth section, Program Outcome in Relation to Legislative Intent, explores whether or not the outcome of the distribution of Supplemental Grants accomplished the Legislative goals. The last section offers Conclusions and Policy Recommendations.

HISTORY OF THE SUPPLEMENTAL GRANT PROGRAM

Over the last 20 years, control over California’s school finance has shifted from the local level to the state (Picus, 1991). The shift began in 1971 with the California Supreme court’s first decision in Serrano v. Priest. The plaintiffs alleged that there were substantial wealth related disparities in per pupil spending among school districts in California and therefore disparities in the quality of, and access to, educational opportunities. Districts with higher property tax bases had higher spending levels available to them; districts with lower tax bases had lower spending levels available to them. Although the plaintiff’s action was originally dismissed by a lower court, the California Supreme Court held that the case was justifiable and that if the facts were as alleged, the California school finance system was unconstitutional. (Odden & Picus, 1992) The case was sent back to Superior Court for trial. Before the Superior Court issued its ruling in the case, the California State Legislature passed
Senate Bill 90, its first attempt to mitigate the wealth disparities held to be unconstitutional by the high court (Sergiovanni, 1989).

Senate Bill 90 increased the guaranteed level of support for K-12 education, thus improving the equalization of the system by "leveling up" low-spending districts, and by allowing property-poor districts to lower their tax rates (Picus, 1988). It also introduced the concept of revenue limits which placed a cap on the general revenues available to a school district. By allowing the revenue limit of low spending districts to grow at a higher rate than high spending districts, the Legislative attempted to gain greater equity across the system. This variable growth in district revenue was called a "squeeze factor". Senate Bill 90 ended local district's ability to levy permissive tax overrides without voter approval, thus attempting to equalize tax rates. It also appropriated funds for the Educationally Disadvantaged Youth Act and the Early Childhood Education Program, thus setting the stage for the increased growth of categorical programs over the next 20 years. (Picus, 1991).

In 1974 Judge Bernard S. Jefferson, of the California Superior Court, issued his ruling in Serrano. In his opinion, Jefferson said Senate Bill 90 did not do enough to equalize spending among districts. He ordered wealth-related revenue disparities among districts in spending for basic educational services be reduced to "amounts considerably less that $100 per pupil," regardless of a district's property wealth. (Picus, 1991). The state appealed Jefferson's decision and in 1976 the California Supreme Court upheld Jefferson's ruling. The funding mechanisms developed in response to Judge Jefferson's ruling have come to be known as Serrano equalization requirements by school district officials and state policy makers.

The shift away from local funding toward state funding continued in 1978 with the
passage of Proposition 13. Proposition 13 was a constitutional amendment passed by the voters of California which limited all property taxes to 1% of assessed value. Growth in assessed value was limited to a maximum of 2% aw year until a property was sold, at which time it would be reassessed at its market value.

Proposition 13 resulted in approximate 60% reduction of local property taxes. To replace local property tax loses, the legislature passed Senate Bill 154, termed the "bailout bill". It appropriated money form the state budget surplus to replace a little over 60 percent of the revenue lost by local school districts. Because a district’s revenue limit aid from the state was defined as the difference between its revenue limit and the amount of property taxes it received through the county, the responsibility for financing education shifted from local school districts and communities to the state (Picus, 1991).

The state now controls approximately 85% of the money a district receives, either through intergovernmental grants or through property taxes which are controlled by the state(Picus, 1991). Districts receive most of their intergovernmental grant revenues in two forms; general aid and categorical aid. General aid grants are unrestricted and can be used as the district chooses. Funds generated from a district’s base revenue limit represent the bulk of its general aid. Categorical aid grants are restricted and are usually provided for a single reason or purpose(i.e.,special funding for limited English proficient students,economically disadvantaged youth or handicapped students), and often come with strict application and reporting procedures. Because they are designed to address special student needs which do not occur uniformly across school districts, categorical aid grants are not subject to the Serrano equalization requirements.
In recent years, districts with a high number of special needs students, such as large urban districts, have been successful in lobbying the legislature to appropriate increasing amounts of money to expand categorical programs. By doing this, new money has been shifted away from general aid (base revenue limit) to categorical aid, resulting in general aid grants growing at a slower pace than categorical aid grants during the 1980's (Legislative Analyst, 1991). By 1991, up to 25% of state aid to local districts was in the form of categorical grants (Picus, 1991). This increase in categorical grants has been at the expense of general assistance (base revenue limit), which all districts receive. Dave Walrath, a lobbyist for small school districts, feels that this disparity caused suburban and rural districts, who usually do not qualify for large sums of categorical aid, to become disgruntled. He argues these districts believe urban districts receive the lion's share of categorical aid, and thus have more per pupil resources available for all education programs.

Many members of the state Legislature represent districts that have been impacted by the changing state demographers. However, the historic design of some of the state's categorical program procedures preclude their receipt of categorical funds to off-set the resulting higher costs. Many of the suburban and rural school districts felt that they should receive more revenue because they now had the same needs as the urban districts. However, they were unable to qualify for most of the existing categorical programs because those programs had funding limits or contained no expansion provisions. Through a unified effort that crossed political party lines, suburban and rural districts worked together to actively pressure their legislators to correct these perceived disparities (Walrath, 1990).

Their opportunity came in 1988, when California's voters approved Proposition 98, a
measure intended to end education's fiscal problems by providing a minimum funding guarantee for California's public K-14 schools. As the implementation legislation for Proposition 98 was being written, lobbyists for the suburban and rural school districts pushed for the creation of a new categorical grant called the Supplemental Grant Program. Members of the Assembly argued that if you take total funding for each school district, and divide by the Average Daily Attendance, district allocations vary considerably. Rather than attack each of several known inequalities in the system, they proposed a program which would equalize categoricals. (McConkey,1991a).

The rationale for the new categorical aid program was to provide additional funds to suburban and rural districts to make-up for the funding that they did not receive through existing categorical aid programs. This has been termed, "categorical equalization" (Goldfinger,1992).

THE NATURE OF SUPPLEMENTAL GRANTS

Supplemental Grants are provided to low revenue school districts in inverse proportion to the amount of other categorical aid they receive. Under the Supplemental Grant Program, districts receive a grant, not because of special needs, but because they do not receive higher levels of other categorical aid. This program is the first, and to date, the only instance in the United States where a school district receives categorical money solely on the basis of its inability to generate other categorical program funds.

Supplemental Grants were viewed as a mechanism to provide equalization of total spending instead of dealing with wealth related disparities. The intent of the Legislature was
to provide funding to districts which had not benefitted from past categorical programs. By appropriating a minimum of $180,000,000 a year, for each of three years, the Legislature believed that the Supplemental Grant program would increase state aid to suburban and rural districts.

THE DISTRIBUTION OF SUPPLEMENTAL GRANTS

The distribution of Supplemental Grants is based on a formula intended to eliminate most urban districts from receiving funds. Supplemental Grant allocations are determined by first adding to each district’s total revenue limit the amounts allocated to the district for each of the following twenty-six designated state categorical programs.

1. High School Pupil Counseling
3. School Improvement Program
4. Vocational Education Pupil Organizations
5. Specialized Secondary Schools
6. Foster Youth Services
7. Opportunity Classes and Programs
8. Pupil Dropout Prevention
9. Economic Impact Aid
10. Gifted and Talented Education
11. Miller-Unruh Reading Program
12. Intergenerational Education
13. American Indian Early Childhood Education
14. Demonstration Programs in Reading and Mathematics
15. Partnership Academies
16. Agricultural Vocational Education
17. Environmental Education
18. Instructional Materials for grades K to 8, Inclusive
19. Secondary Instructional Materials and Testing
20. Mentor Teacher Program
21. Beginning Teacher Support
22. Reader Service for Blind Teachers
Next, using the average daily attendance for the year funds are received as a divisor, the district’s per pupil funding is computed. This figure is then compared to the state-wide average for districts of similar size and type. School districts with per pupil revenues below the state-wide average are eligible for a Supplemental Grant of $100 per pupil or the actual difference from the state-wide average, whichever is less. (Honig, 1989).

State aid for special education programs, court-ordered and voluntary desegregation programs, regional occupational centers and programs, adult education programs, and child development programs are specifically excluded from the calculation of Supplemental Grants.

This formula was opposed by some rural legislators because it included transportation funds in determining eligibility for the grant. The inclusion of transportation funds hurt many small school districts that receive substantial transportation assistance due to their large geographic size. It had initially been presumed that a formula designed to keep funds away from urban districts would be beneficial to small rural school districts. However, because the Small School District Transportation Grant was included in the calculation this did not happen.

Supplemental Grants were distributed to districts by size and type in FY90 using the six categories established by the State Department of Education. Forty-seven percent (47%) or 474 of the state’s 1010 districts received grants. The grants were evenly distributed between the six categories, with 45% of elementary, 46% of high schools and 52% of unified school...
districts receiving Supplemental Grants.

Because the California Department of Education's six categories make it difficult to determine if Supplemental Grants were distributed to the rural and suburban districts as intended by the Legislature, additional analyses were undertaken. The distribution of Supplemental Grants based on 12 categories better represents the variation in school districts in the State of California. Using these 12 categories we find that only 34% of smaller districts (less than 2,500 ADA) received Supplemental Grants, 67% of medium sized districts (2,501 to 10,000 ADA) received Supplemental Grants, 83% of large districts (10,001 to 40,000 ADA) received grants, and 44% of very large districts (greater than 40,001 ADA) received grants. Thus, although 65% of all school districts in California can be classified as small, such districts received only 47% of the 474 grants awarded. It appears from these data the Legislature's intent that the grants go to small districts is not met. Further, the small and medium districts together represent 89% of the districts, but only received 80% of the grants. Large and very large districts which make up only 11% of the districts received 20% of the grants.

It is also important to examine the relationship of size to amount received. Table 1 shows that the average amount of Supplemental Grant per student was $89.04 for unified districts under 2,500 ADA. Although this was the largest average per pupil grant, because of the small number of students per district, the average total grant amounted to only $106,222. Unified districts with more than 40,000 students received an average grant of $53.71/student, but their average grant was $4,180,182.

USE OF SUPPLEMENTAL GRANTS

The Legislature intended that school districts have flexibility in using the funds they
received through the Supplemental Grant Program. However, the funds had to be spent for specific programs and could not be considered an additional source of general revenue. Originally, Supplemental Grant funds could not be used to replace local non-categorical funds that would have been available for a categorical program in the absence of the Supplemental Grant. In general, this meant that local funds currently dedicated to program improvement efforts could not be reduced simply because new money for program improvement was not available. The point was to build and expand current programs and not simply redistribute funds to new programs (Honig, 1989).

A district's discretion to spend Supplemental Grants was not without limits, however (Honig, 1989). A Supplemental Grant could only be used to improve and expand existing categorical program activities or to carry out new activities related to the general purposes of one or more of the 26 categorical programs. Another categorical program, School-Based Management/Teacher Career Advancement was added late by the Legislature, increasing the list of allowable spending areas to 27. This program was added only for the purpose of allowable Supplemental Grant spending but was not added to the list of categoricals used in the funding formula (Honig, 1989).

In July, 1990 districts were notified that they were no longer required to certify their Supplemental Grant Funds were used to supplement current expenditures for one or more of the 27 categorical programs. This had the effect of allowing districts to use the money to supplant general fund expenditures (Keegan, 1990).

In FY90 474 districts received Supplemental Grants. Of the 474 districts receiving Supplemental Grants only 227 (48%) spent all or part of the grant in that year. The rest of
the districts chose either not to spend the money the year they received it, or data on how the funds were spent were unavailable.

Supplemental Grants could only be spent on one or more of the 27 programs designated by the state. Some districts spent their funds in only one program area while others spent their money in a number of different program areas. For example, 49.3% of the districts who spent their supplemental grant funds spent all or part of these funds on transportation. Home-to-school transportation, School Improvement, Instructional materials for grades K-8, and Economic Impact Aid were the programs selected most often by districts. These four programs were also cited as receiving the largest share of categorical funds from the state in FY90.

PROGRAM OUTCOME IN RELATIONSHIP TO LEGISLATIVE INTENT

The Legislature's two main goals in implementing this program were to provide additional categorical money to rural and suburban districts, and to equalize total funding for low spending districts.

The program did not meet the first goal. Only 34% of small districts (<2500 ADA) received grants. Even though small school districts comprise 65% of all California districts they did not receive their share of the program. The 111 districts (>10,000 ADA) are generally classified as urban districts. Of these, 89 (80%) received grants. Not only did a greater proportion of the large and very large districts receive grants, but the grants were distributed on a per pupil basis, thus 63% of the funds available went to these districts while small and medium districts (89% of total) received only 37% of the available funds.

In all districts, except the very large unified school districts, the mean base revenue
limit was greater for districts who did not receive these grants. Very large districts with or without grants had the same mean base revenue limit. It should also be noted that the mean categorical funds for all district types, except medium high schools, were higher for districts not receiving these grants than for districts which did receive these funds.

Table 2 points out that the addition of these grants did not decrease the disparities in categorical funding for all district types. Not only did the addition of these grants close the gap, in medium elementary and high school districts and all classes of high school districts, these grants caused the mean total of categoricals to be higher than the average for districts not receiving the grants. Thus, the second Legislative goal was not met. Even though the disparities decreased for small school districts, they still received less money than did districts not receiving the grants.

CONCLUSIONS & POLICY RECOMMENDATIONS

California’s Supplemental Grant program represents a dramatic change in the way we traditionally think of categorical grants. The purpose of categorical grants is to help equalize differences in student needs across school districts. If special need children were uniformly distributed across school districts there would be no need for such programs. Unfortunately such a distribution does not exist. Hence the use of categorical aid and compensatory assistance. California’s school finance system has been highly successful in reducing wealth related spending differences across school districts. This is due to the Serrano equalization requirement that such differentials are largely eliminated and the passage of Proposition 13, which limited all property taxes to 1% of assessed value. As described above, these two factors have also led to greater state control over school district finance.
Shifting control to the California State Legislature has also changed the politics of funding decisions, and over time, the state has increased funding for its categorical programs faster than it has increased general aid for school districts. As a result, spending levels in many low spending rural and suburban districts with low incidence special needs children has not kept up with other districts. These districts successfully lobbied for implementation of this grants program, which was the first such program in the nation that makes receipt of a categorical grant conditional upon not receiving other categorical funds.

The intent of this program's supporters was to equalize total district spending (as opposed to the Serrano requirement to equalize wealth related spending differences). This was accomplished by making districts with low spending levels and few categorical grants eligible for these new funds. Unfortunately, as the data show, not all the money was distributed as originally intended. May large urban districts also qualified for this program and a number of small rural districts who receive high levels of categoricals did not qualify.

In fact, there is evidence of districts refusing to apply for other categorical grants because funds received through this program would exceed what they would have received in the other categoricals and would have the added benefit of not having regulations tied to the money. These unanticipated economic effects further complicate the ability of the state to establish an equitable school finance system.

If the goal of the Legislature is to provide additional funds to low spending districts, we believe that adding additional money to the basic aid equalization program is a more appropriate approach. This assures that funds are available to those districts with the lowest average spending levels, regardless of composition and continues to provide support to districts
heavily impacted by special needs students.

There is a long history of providing general equalization through the basic aid system in California. The Legislature often makes appropriations to "level up" the lowest spending districts. Examples include the "squeeze factor" implemented along with the revenue limits by Senate Bill 90, and the Senate Bill 813 requirement that equalization be provided so that all districts spending below the statewide average be brought up to that average. While the later is mathematically impossible without a completely uniform spending structure, it provides evidence of the willingness of the legislature to consider greater equalization of general aid to school districts.

In conclusion, it is our view that greater equalization of the California school finance system would be better achieved by using funds for Supplemental Grants to increase the revenue limits of the lowest spending districts in the state. The remaining issue of what proportion of the total resources should be devoted to categorical assistance and general assistance continues to require resolution. It may well be that categorical program growth has been rapid, and it is not time for the state to consider devoting more resources to general aid and less to categorical programs.

REFERENCES


The Right Answer to the Wrong Question: The Current State of School Funding in Washington

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A dominant theme in the recent history of public school finance is the trend towards state governments providing an ever greater share of school revenue. State governments furnished one-third of K12 public school support in the 1945-6 school year (Salmon, 1987); by 1990-91, this figure stood at nearly one-half (National Education Association, 1991). Surprisingly, though, while substantially increased levels of state and/or federal funding are often presented as a panacea for many of the problems facing elementary and secondary schools in the U.S., policy makers have paid little attention to the trade-offs involved in moving to a more centralized school funding system.

This paper will confront some of the financial and organizational realities faced by educators in Washington, a state with the third highest level of state-level funding in the U.S. Its purpose is to inform policy makers of some potential ramifications in moving to greater dependence upon state funding. It will do so by going beyond a simple recitation of school funding statistics to directly address what, if any, difference it makes to Washington’s children and education staff that the state’s schools are primarily state funded.

Policy Issues

From the early 1970s to the present, a powerful realignment of forces has taken place in those states in which the public
schools have become financially dependent upon state government. This shift is comparable in impact to the Progressive movement that sought to "take the schools out of politics" (Tyack, 1974), but the current trend is taking schools in just the opposite direction. The result has been to undo many of the gains made by Progressive reformers such as Elwood Cubberley and George Strayer and to place the schools under increasing political control.

The experiences of Washington suggest that while higher levels of state funding can be effective in equalizing expenditures, it also introduces a new and equally daunting set of school funding challenges. Although the idiosyncratic nature of the events that have occurred in Washington over the last 15 years suggests that lessons from Washington’s experience should not be pushed beyond their obvious limitations, educators should be cognizant of the tensions inherent in shifting school funding decisions from local to state leaders before implementing such a change.

Results

In Seattle School District v. State (1977), the Seattle School District obtained a judicial mandate directing the state to make ample provision for the education of all children in the state without heavy reliance on special school levies. Hopes that finance reform would provide significant improvements in the level of funding provided to K12 public schools in Washington have not been realized, however. Instead, the impact of school finance reform has been to equalize access to resources across the state, which as led
to a marginal shift in resources away from school districts with large numbers of poor students and toward districts with mostly while, relatively wealthy students.

Impact on Adequacy

In 1976-7, the school year in which the courts declared Washington’s previous educational funding system to be inadequate, state and local funding per pupil as 1.8% below the national average; by the 1989-90 school year, state and local funding per pupil in Washington was still 1.0 percent below the national average (Theobald & Hanna, 1991). This static level of school expenditures can be directly linked to a relatively lower level of effort in the state to adequately fund schools. In the 1976-77 school year, Washington ranked 19th in the U.S. in the percentage of the state’s personal income allocated to K12 education (National Education Association, 1979). In 1988-89, Washington ranked 38th in this measure of public school spending effort (National Education Association, 1991).

Since 1977, the legislature has also attempted to set and control teachers’ salaries. The initial approaches at limiting salary increases were blocked by an adverse attorney general opinion (Washington Education Association v. State, 1977) and the State Supreme Court (Washington Education Association v. State, 1980). The 1981 legislature succeeded, however, in capping teacher salaries by severely curtailing the authority of local school boards to set salaries. The 1981 revision requires local boards to limit school employee salary increases "to the amount and/or percentage provided in the biennial budget" for this purpose (Washington State Legislature, 1981, p. 33).
At the time the state legislature passed this legislation, the average teacher’s salary in Washington was 17.6 percent above the national average; over the last decade, average salaries among Washington’s teachers increased by less than 4% in constant dollars, while the national average rose by 22%. As a result, by the 1990-91 school year, average salaries for Washington’s teachers had fallen to the national average.

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INSERT TABLE 1 ABOUT HERE

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Impact on Equity

While the relative adequacy of the state’s school finance system improved only slightly between 1976-7 and 1989-90, the legislation passed in the aftermath of Seattle did significantly improve horizontal equity among students. In 1976-7, the student at the 95th percentile in terms of total revenue was supported by 70.8% more revenue per pupil than was the student at the 5th percentile. By 1989-90, the state narrowed this gap to only 41.1%. The state also cut the 75:25 restricted range ratio by nearly 70% in the last 13 years.

Additionally, at the time the state legislature introduced a more highly centralized funding system, the average salary in lowest-paying school district in the state was barely one-half that paid in the district with the highest average salary in the state; currently, the lowest average district salary in the state is only 6% less than the highest average district salary in the state. Teachers in higher-salaried districts have borne the brunt of this equalization, though. While teachers in the lowest-paying school district realized a more

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than 50% inflation-adjusted base wage increase, teachers in the highest-salaried districts found their real base salaries cut by nearly 10% during the last decade.

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INSERT TABLE 2 ABOUT HERE

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Teachers in 36 school districts in the western part of the state went on strike in the Spring of 1991 to protest current state compensation practices. A driving factor in this dissension is the difference in costs of living across the state. For example, in FY91 the average salary for Seattle's teachers was 2% higher than the average salary in Spokane. When cost of living differences are taken into account, the purchasing power of the average teacher salary in Seattle was $4,091 (12%) less than in Spokane (Theobald & Baker, 1991).

Although greater equality is often viewed as an end in itself, in a situation in which revenues were barely keeping pace with national trends, the significant reallocation of resources required to nearly equalize salaries statewide suggests that financial reform in Washington has been more a matter of "robbing Peter to pay Paul" than it was a situation of improving the educational resources provided to every group. Unfortunately, one group that now receives "a smaller slice of the pie" is the school districts educating the highest percentage of students living in poverty. Between FY77 and FY90, the share of state and local school revenues received by school districts educating the highest percentage of students eligible for free or reduced-price lunches fell by 4.9%. During the same period, students in school districts with the lowest percentage of students eligible for free or reduced-price lunches increased their share of school revenues by 2.5%
The move to equalize resources also had a negative influence on the relative share received by students in those school districts educating the highest percentage of minority students. The share of state and local school revenues received by school districts educating the highest percentage of minority students declined 1.4% and students in school districts with the lowest percentage of minority students increased their share by 6.1% between FY77 and FY90 (Theobald & Hanna, 1991).

Implications

Over the last decade of educational reform efforts, policy makers and educators have come close to agreement on a crucial concept: the individual school is the natural and most promising focus for effecting significant educational improvement (Sirotnik, 1989). The experiences of states such as Washington suggest that one of the consequences of significantly increased levels of state funding for K12 schools can be a situation in which state legislators make nearly all significant school funding decisions. Strict controls on local discretionary funding, which is the standard quid-pro-quo for increasing the state’s share of school revenue, have created finance systems in which local schools are powerless to generate the incremental dollars needed to support the type of "bottom up" school-specific reforms championed by leading educators such as Sizer (1992), Lieberman (1986), Sarason (1990), and Goodlad (1987).

Another implication of this shift of power from local school boards to the state legislature is driven by their widely differing scopes of responsibility. School board members are citizens from the community whose sole responsibility is K12 education.
State legislators must necessarily balance the financial needs of K12 education against numerous requests they receive with respect to crucial issues such as public safety, health care, and transportation.

While society expects local school boards to act in the best interests of the public schools, state legislators operate under very different constraints. As one of our state's political leaders recently pointed out, "The fact is, there is no political profit in being a crusader for the schools. Legislators can count votes and they understand that parents of school-age children account for less than one-quarter of the voters" (Anderson, 1991, p.A4). At a time when the nation's schools need all the crusaders they can get, the current desire to move school funding decisions from a body whose sole focus is public education to the state political arena, where schools must compete with a variety of powerful interests, should be closely scrutinized. The experience of public schools in Washington suggests that urban schools serving high percentages of politically powerless groups – such as poor and minority children – are likely to suffer most in this shift.

Lastly, voters are simply more supportive of local schools than they are of the educational system as a whole. The latest Gallup Poll on Attitudes toward the public schools shows that 42% of those surveyed give their local schools an "A" or "B", while only 21% give the nation's schools these high marks (Elam, Rose, & Gallup, 1991). Given such data, it seems reasonable that voters would be more likely to financially support their local schools than they would be to vote for state tax measures that are intended to support a legion of faceless schools that these voters hold in low regard.
Research evidence has begun to emerge which suggests that state policies designed to equalize expenditures across school districts have adversely affected political support for these states' public schools (Downes, 1992; Fischel, 1989). This work argues that this lowered public support has led to a slower growth in public school revenues in these states than would have occurred in the absence of these policies. Students in states such as Washington, therefore, find themselves in a situation in which they have a more equal amount of less.
REFERENCES


REFERENCES (continued)


### TABLE 1

**Washington's Average Teacher Salary Compared to the U.S. Average 1980-81 and 1990-91, Adjusted to Constant 1981 Dollars**

<table>
<thead>
<tr>
<th>Average Teacher Salary</th>
<th>1980-81</th>
<th>1990-91</th>
<th>Percentage of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>17,590</td>
<td>21,460</td>
<td>+ 22.0</td>
</tr>
<tr>
<td>Washington (180 day contract)</td>
<td>20,693(^1)</td>
<td>21,482</td>
<td>+ 3.8</td>
</tr>
<tr>
<td>Percentage of Difference</td>
<td>+ 17.6</td>
<td>+ 0.1</td>
<td>—</td>
</tr>
</tbody>
</table>

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\(^1\) Estimated based on 180 days of contracted employment. The reported 1980-81 Washington average teacher salary of $21,268 includes payment for additional days beyond the standard 180-day teacher contract; the reported 1990-91 Washington average teacher salary is for 180 days only. In order to allow for meaningful comparison, this study uses a liberal assumption that the 1980-81 salary data include pay for an average of five additional days per teacher. Source: National Education Association (1982). *Rankings of the states, 1982*. West Haven, CT: Author; National Educational Association, (1991). *Rankings of the states, 1991*. West Haven, CT: Author.
### TABLE 2

**Teacher Salary Differentials Across School Districts in 1978-79 and 1990-91, Adjusted to Constant 1979 Dollars**

<table>
<thead>
<tr>
<th>Avg. Adjusted² Washington Teacher Salary FY79</th>
<th>FY91</th>
<th>Percentage of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Paying Dist. in State</td>
<td>12,415³</td>
<td>11,337</td>
</tr>
<tr>
<td>Lowest Paying Dist. in State</td>
<td>6,974</td>
<td>10,661</td>
</tr>
<tr>
<td>Percentage Difference</td>
<td>-43.8</td>
<td>-6.0</td>
</tr>
</tbody>
</table>

² Adjusted for differences across school districts in staff experience and educational attainment.

³ Estimated based on 180 days of contracted employment. The reported FY79 average adjusted teacher salary in the highest-paying district in the state of $13,105 includes payment for additional days beyond the standard 180-day teacher contract; reported FY90 teacher salaries are for 180 days only. In order to allow for meaningful comparison, this study assumes that the FY79 salary data for the highest-paying district in the state include pay for an additional ten days of employment per teacher in this district; FY79 salary figures for the lowest-paying district in the state are assumed to include pay for no additional days. Source: Superintendant of Public Instruction, Financial Services Bulletins 35-79 and 11-91, State of Washington.
Part I: Introduction

Defining Equity

Like motherhood, baseball, and apple pie, everyone seems to be in favor of equity—particularly when it comes to questions about financing our public schools. Yet equity, like a good many other concepts, is open to a wide variety of interpretations. Equity means different things to different people. For example, when it comes to public school finance, some suggest that equity requires that equal dollars be spent on all pupils. Some suggest that equity calls for special treatment for special needs and, consequently, requires unequal dollars be spent on pupils. Some suggest that, in order to achieve equity, the taxable wealth of a school district should not be permitted to determine the level of resources available to pupils. Others suggest that it is not so much a question of the dollars that are available, but rather what the dollars are able to buy. Needed resources, teachers for example, may cost more in one district than they do in another. Still others suggest that not only is it a question of equity for pupils, but also—and equally important—a question of equity for taxpayers.

Thus we are faced with a multiplicity of interpretations and a multiplicity of views on what constitutes equity in school finance. And each of these interpretations and each of these views is based on a particular set of values, i.e., a person’s preferences for what should be and for what should not be. The problem is further compounded by the apparent difficulties of setting forth, in concrete, clear, and understandable terms information on the progress—or lack of progress—that is being made in the attainment of any or all of these equity goals.

Recent Work in the Measurement of Equity

Fortunately, recent years have seen an increasing number of researchers turning their attention to this problem and undertaking the development and use of quantitative and, one hopes, meaningful and useful measures of equity in school finance. The most definitive work in this area, on which a good many of the more recent studies draw, is the work done by Robert Berne and Leanna Stiefel.1 Their early and later work spawned a number of state-level studies aimed at measuring the status and progress of

equity in school finance. As Odden and Picus note, "The Berne and Stiefel equity framework has come to dominate empirical analyses of school finance equity."  

The Present Study

One of these studies, which built directly on the earlier work of Berne and Stiefel, was Kearney and Chen's 1989 study of equity in Michigan school finance. In this present paper, we extend Kearney and Chen's earlier work and examine equity trends in Michigan school finance over a thirteen year period: 1976-77 through 1988-89.

While we did conduct an extensive and quite comprehensive analysis of equity trends over that thirteen year period, we have chosen to present only a selected subset of our results in the body of this paper, and in a somewhat different format than one usually finds in a scholarly paper. Through a series of graphs and tables geared to particular interpretations of equity, we provide evidence that should help the interested reader assess whether Michigan's public school finance system, over the past several years, is moving toward or away from the equity goals that best meet particular values, i.e., readers' as well as others' preferences for what should be or not be.

We do this with an eye to making the results, we hope, useful not only to researchers in school finance but also to state level decision-makers and other interested groups and individuals who influence and help shape state school finance policy. Our primary intent is to help readers get a better handle on some of the differing interpretations of equity, a better fix on the value judgments involved, and some sense of whether Michigan is making progress in its pursuit of equity in its school finance arrangements.

The Four-Dimensional Framework

To undergird their assessments of equity, Berne and Stiefel employ a four-dimensional framework. We use the same framework in our study, and outline and briefly discuss that framework below.

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4Kearney and Chen, op. cit.

5Results of our full analysis are presented in tabular form in the appendices.

6Berne and Stiefel, op. cit.
Equity Targets

The first dimension of the framework addresses the question of equity for whom? Who will be the target of the equity assessment? Are we interested in equity for pupils or for taxpayers? Or for both? In this paper, we present selected information on equity trends for both pupils and taxpayers.

Equity Objects

The second dimension of the framework addresses the question of equity of what? Are we interested in seeing that revenues are distributed equitably? Or resources in general? Or expenditures? Or the outcomes of schooling? Or tax burdens? Or all of these? We present in this paper our results on a small, select number of equity objects—the first set dealing with equity for pupils and the second set with equity for taxpayers.

In assessing equity for pupils, we have chosen to include the following objects:

(1) Local revenue plus state membership aid per pupil—the dollars generated within the school district, principally from local property taxes, plus the dollars received from the state under the membership formula, divided by the number of pupils.

(2) Current operating expenditures per pupil—the basic operating expenses of a school district, including the total costs of instruction and the total cost of support services, divided by the number of pupils.

(3) Instructional Staff per 1,000 pupils—the number of instructional staff—classroom teachers plus instructional support staff—in the district per 1,000 pupils in enrollment.

(4) State equalized valuation per pupil—the taxable value of real and personal property in a district, divided by the number of pupils.

In assessing equity for taxpayers, we chose three objects:

(1) Levied millage—the actual millage levied by the district for operating purposes, including allocated and voted millage.

(2) Local revenue plus state membership aid per pupil—the dollars generated within the school district, principally from local property taxes, plus the dollars received from the state under the membership formula, divided by the number of pupils.

7The entire set of equity objects included in our full analysis are listed in the tabular information presented in the appendices.
(3) *State equalized valuation per pupil*—the taxable value of real and personal property in a district, divided by the number of pupils.

**Equity Principles**

The third dimension of the equity framework identifies three principles that we can use to determine if *equity objects* are distributed equitably or fairly among groups of pupils and, where appropriate, among taxpayers.

The first of these principles, labeled *horizontal equity*, calls for "equal treatment of equals," with the goal being to minimize the spread among districts in the distribution of *equity objects*, for example, the distribution of *local plus state membership aid per pupil*. This principle also suggests that, in terms of taxpayer equity, the goal is to minimize the spread among school districts in the distribution of property tax burdens, for example, the distribution of *levied mills*.

The second principle, labeled *equality of opportunity*, calls for no variation among districts in the distribution of *equity objects* as a result of "suspect" factors such as relative property tax wealth, or race, or gender. Under this principle, for example, *state equalized valuation per pupil* ought not determine the amount and quality of resources that a district can provide its pupils.

The third principle, labeled *vertical equity*, calls for "unequal treatment of unequals," with the goal being to provide for pupils with special needs, such as the handicapped. Under this principle, unequal dollars would be spent to provide special programs and services for these pupils. In terms of taxpayer equity, this principle suggests adopting policies aimed at reducing the regressivity in the property tax, i.e., the fact that lower income households generally pay a much higher percent of their income for property taxes than do higher income households.

**Equity Measures**

The fourth dimension of the framework is concerned with the measures that we can use to assess equity in terms of each of the three principles. How will we know if, over time, Michigan is making progress in horizontal equity? Or in equality of opportunity? Or vertical equity?

There are a number of measures available to answer these questions. One set consists of *dispersion measures*. These allow us to assess the principle of *horizontal equity*. Through the use of these measures we can determine if the spread among districts in the distribution of equity objects is improving or worsening. We have chosen to present the results using only three *dispersion measures*: the restricted range, the federal range ratio, and the McLoone Index. They are explained briefly below:

8 The results of additional dispersion measures used in the full analysis—range, variance, coefficient of variation, gini coefficient—are presented in the tabular information included in the appendices.
(1) **Restricted Range**—The difference between the values of the equity objects per pupil at the 95th and 5th percentiles of the distribution.

(3) **Federal Range Ratio**—the Restricted Range divided by the value of the equity object per pupil at the 5th percentile.

(4) **McLoone Index**—the ratio of the actual sum of the equity object per pupil for all districts below or at the median to the sum of the object per pupil that would exist if each district below the median were at the median object per pupil.

The range, which we do not present here, enables us to determine the size of the difference between the highest and lowest district in terms of a particular equity object, say, *current operating expenditures*. The restricted range, which we do present, ignores the upper and lower tails of the distribution, thus eliminating extreme "outliers" that may unduly influence the range. Thus, if the district at the 95th percentile was spending $7,000 per pupil and the district at the 5th percentile $3,000 per pupil, the restricted range would be $4,000. This is a relatively simple, straight-forward, and easily understood measure. However, we should note that the restricted range (as well as the range), since it is sensitive to equal percentage changes, will change simply as a result of inflation. Consequently, when presenting trends using the restricted range we have adjusted for inflation, using 1988-89 as the base year.

The federal range ratio and the McLoone Index, on the other hand, are not subject to equal percentage changes and do not change simply as a result of inflation. Thus, they enable us to track increases or decreases in dispersion of equity objects over time without having to adjust for inflation.

In theory, strict horizontal equity calls for zero values on the first two measures—the restricted range and the federal range ratio. In reality, such a situation is unlikely. Thus, we are more interested in seeing decreases in these values over time. Decreases represent movement toward horizontal equity; increases represent movement away from horizontal equity.

The McLoone Index, on the other hand, is scaled in the opposite direction and, rather than measure the degree of dispersion in the entire distribution (as the other two measures do), is interested only in the degree of dispersion in the bottom half of the distribution. Strict horizontal equity in the bottom half, i.e. no dispersion among districts in the equity object per pupil, is represented by a value of 1.0 on the McLoone Index. Increases in the value represent movement toward horizontal equity; decreases represent movement away from horizontal equity.

A second set of measures consists of relationship measures. These allow you to assess the principle of equality of opportunity. Through the use of these measures you can determine if there is a relationship between a "suspect" factor such as a district’s *state equalized valuation per pupil* and an equity object such as *total revenue per pupil*. Again, in the interests of simplicity, we have chosen to present only one relationship
measure, namely, the correlation coefficient. This measure is explained briefly below:

(1) correlation coefficient—a measure of the degree to which two variables are related; it expresses the strength of the relationship.

In theory, strict equality of opportunity also calls for a zero value on the correlation coefficient. Once again, in reality, such a situation is unlikely. Thus, we are more interested in seeing decreases in this value over time. Decreases represent movement toward horizontal equity; increases represent movement away from horizontal equity.

A combination of dispersion measures and relationship measures can be used to assess trends in vertical equity. However, the measurement of vertical equity, particularly for pupils, is a bit more complex and the procedures for doing so are nowhere near as fully developed as for the assessment of horizontal equity and equality of opportunity. Thus, in this presentation, we limit ourselves to providing information only on the measurement of horizontal equity and equality of opportunity.

The Data Source

The data were acquired from Michigan's School Aid Data Instant Exhibits (SADIE) master tapes. SADIE annually provides important financial information by district including revenue by source, expenditure by function, millage rates, staff and pupil counts by area, and state equalized property valuation.

Part II: Equity Trends—1976-77 Through 1988-89

Part II of the paper is divided into four major sections. The first two sections, A & B, address equity for pupils, examining respectively trends in the distribution of revenues and trends in the distribution of expenditures. The third section, C, examines equity trends in what dollars buy, specifically instructional staff per 1,000 pupils. The final section, D, explores trends in equity for taxpayers.

Within each section, the pages are organized in an even-odd sequence. Each even-odd pair deal with a particular aspect of equity, e.g., horizontal equity trends in the combination of local revenue and state membership aid per pupil as measured by the restricted range. On the odd-numbered page (the right-hand page), the trend is graphically illustrated in a chart and numerically summarized in a table. The even-numbered page (the left-hand page) contains a brief narrative description of what has happened over the thirteen-year period and our interpretation of trend or trends. The particular aspects of equity being dealt with in each even-odd pair are identified at the top of the odd-numbered page. For example, at the top of page 8 you will find the entry:

9The results of additional relationship measures used in the full analysis—simple slope, simple elasticity, and simple adjusted relationship—are presented in the tabular information included in the appendices.
HORIZONTAL EQUITY FOR PUPILS

Equity Object: Local + State Membership Aid Per Pupil
Equity Measure: Restricted Range

Thus, on this particular even-odd set of pages the equity target is pupils (as opposed to taxpayers); the equity principle is horizontal equity (as opposed to equality of opportunity or vertical equity); the equity object is the revenue per pupil raised through the combination of local property taxes and state formula aid (as opposed, for example, to current operating expenditures, instructional staff per thousand, etc.); and the equity measure is the restricted range (as opposed to the federal range ratio or the Mcloone Index).

A note is in order about the charts. The horizontal axis is scaled in years; the vertical axis is scaled in terms of the specific values on the particular equity measure being used. The chart is also set so the closer the value is to the horizontal axis, the greater the degree of equity. Thus, movement toward equity will be represented by a downward trend line, and movement away from equity will be represented by an upward trend line.
HORIZONTAL EQUITY FOR PUPILS

Equity Object: Local + State Membership Aid Per Pupil
Equity Measure: Restricted Range

The restricted range, as opposed to the range, ignores the upper and lower tails of the distribution, thus eliminating extreme "outliers" that may unduly influence the range. It tells us the size of the difference between the district at the 95th percentile and the district at the 5th percentile.

Since the restricted range is a measure highly susceptible to inflation, we have price-adjusted the dollar figures using 1988-89 as the base year. Thus all dollar figures are held constant and expressed in terms of 1988-89 dollars.

In this case, the choice of equity object—local + state membership aid—is an important one. One of Michigan's avowed policy goals, through its state aid formula, is to reduce disparities among school districts in per pupil revenues available. If the state aid formula is working as originally envisioned, we should expect to find the restricted range decreasing over the thirteen year period—particularly in terms of constant dollars.

We don't find this. Instead we find a consistent increase in the restricted range over the thirteen year period and, correspondingly, a consistent trend away from horizontal equity. The restricted range more than doubles in constant 1988-89 dollars. At the start of the period, the restricted range was $1,248; at the end of the period, it has risen to $2,641. (If we had not corrected for inflation, the difference would have been substantially greater.) There is twice as much horizontal inequity in 1988-89 as there was in 1976-77.

Thus, we find that horizontal equity for pupils, as measured by the restricted range in local and state formula dollars available, has considerably worsened over the past thirteen years. The state aid formula, designed in part to minimize basic revenue differences among districts, is failing far short of one of its major goals.
Local + State Membership Aid Per Pupil

Restricted Range

<table>
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<tr>
<th>Year</th>
<th>76-77</th>
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<th>79-80</th>
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</table>
HORIZONTAL EQUITY FOR PUPILS

Equity Object: Local + State Membership Aid Per Pupil
Equity Measure: Federal Range Ratio

The *federal range ratio*, unlike the restricted range, is not subject to equal percentage changes and does not change simply as a result of inflation.

In applying the federal range ratio to local plus state formula aid per pupil, we see a pattern very similar to what we found when applying the restricted range. Other than a small downturn between 1982-83 and 1984-85, we find a fairly consistent pattern over the thirteen-year period—the federal range ratio is increasing and, thus, horizontal equity is decreasing. At the start of the period in 1976-77, the federal range ratio was 0.606; by 1988-89, the end of the period, the ratio had increased to 1.000. The district at the 95th percentile has twice as much basic revenue per pupil as the district at the 5th percentile.

Again, the evidence is pretty clear. Horizontal equity for pupils, as measured by the federal range ratio applied to the local and state formula dollars available, has been losing ground. School finance arrangements in Michigan are not reducing the disparities among districts in available local and state formula dollars per pupil. If the formula is intended to help reduce these disparities, it is not doing that. In fact, just the opposite is occurring. The overall gap is widening.
Local+State Membership Aid Per Pupil

Federal Range Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>76-77</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
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<td>Ratio</td>
<td>0.606</td>
<td>0.649</td>
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<td>0.755</td>
<td>0.794</td>
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</table>
HORIZONTAL EQUITY FOR PUPILS

**Equity Object:** Local + State Membership Aid Per Pupil  
**Equity Measure:** McLoone Index

The *McLoone index* reflects a different value emphasis than the previous two measures—the restricted range and the federal range ratio. They inherently place emphasis on reducing overall dispersion; the McLoone index weighs more heavily equity objects at the lower end of the distribution. It is a measure attractive to those who are particularly interested in reducing disparities among the districts in the bottom half of the distribution. If, indeed, that is a policy goal of the Michigan school finance program, then we have a somewhat brighter picture, at least in the last three years of the period. (Remember that the McLoone index is scaled in the opposite direction from that of the other measures. Increases in the value will represent movement toward horizontal equity; decreases will represent movement away from horizontal equity. Thus, we have “flipped” the scale on the vertical axis so that this chart is consistent with the others, i.e., movement toward the horizontal axis represents movement toward equity.)

The thirteen year period begins with a reading of 0.901 and, even with a couple of decreases, the reading increases to 0.924 by 1982-83, indicating an increase in horizontal equity. But then we have a substantial drop-off in the index, to 0.875 by 1986-87, suggesting a considerable loss in horizontal equity during that period. However, beginning in 1986-87, the trend again reverses itself and most of the lost ground is made up by 1988-89.

What may be somewhat gratifying to those readers whose values coincide with the values inherent in the McLoone index, i.e., a particular emphasis in reducing dispersion in the bottom half of the distribution, is the fact that the period ends up better than it started. The 1976-77 reading was 0.901; the 1988-89 reading is 0.917. This was not the case with the previous two measures, where the period ended with worse readings than it started. Thus, we find that the use of the McLoone index results in a somewhat more favorable view of horizontal equity in the Michigan system. There still is substantial dispersion or spread in the bottom half of the distribution but the overall trend, and certainly the trend in the final two years of the period, are favorable ones.
Local + State Membership Aid Per Pupil
McLoone Index

<table>
<thead>
<tr>
<th>Year</th>
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<td></td>
<td>0.901</td>
<td>0.916</td>
<td>0.912</td>
<td>0.911</td>
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EQUALITY OF OPPORTUNITY FOR PUPILS

**Equity Object:** Local + State Membership Aid Per Pupil  
**Equity Measure:** Correlation Coefficient

The use of the *correlation coefficient* allows us to determine whether a "suspect" factor is having an influence on the distribution of an equity object. Remember, in theory, strict equality of opportunity calls for a zero value on the correlation coefficient. In reality, such a situation is unlikely. Thus, we are more interested in seeing decreases in this value over time. Decreases will represent movement toward equality of opportunity; increases will represent movement away from equality of opportunity.

The "suspect" factor in this case is *state equalized valuation per pupil* and the equity object is *local + state membership aid per pupil*. Thus, we will want to raise two questions: Is the relative tax wealth (SEV/pupil) of a district related to how many dollars—in a combination of local and state membership aid per pupil—the district has available? If so, is the situation getting better or worse over time?

What do we find? Over the thirteen-year period, there indeed is a strong positive relationship between SEV/Pupil and local + state membership aid. The correlation coefficients are quite high, ranging from .56 to .79, indicating a positive and a relatively strong relationship. The relative tax wealth of a district does determine how many dollars will be available. And the general trend over time is an increase in the correlation coefficient. Equality of opportunity has worsened over the thirteen year period.

This is particularly troublesome since one of the avowed policy goals of the Michigan program is to guarantee an equal dollar yield for an equal tax effort. The basic concept underlying Michigan's so-called Equal Yield Plan, adopted in 1973, is that—irrespective of a school district's taxable wealth—the state will guarantee the district the same basic revenue per pupil as any other district levying the same tax rate. In effect, if the policy goal were being attained, there should be no relationship, i.e., a near zero correlation, between property tax wealth and basic revenues per pupil. Not only do we find such relationships, but their strength generally increases over the thirteen-year period—producing a clear pattern of decreasing equality of opportunity. The major policy goal embedded in Michigan's Equal Yield Plan has not been achieved; what's more, it is further from attainment in 1988-89 than it was in 1976-77.
Local + State Membership Aid Per Pupil
Correlation Coefficient (with SEVpp)

<table>
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<tr>
<th>Year</th>
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HORIZONTAL EQUITY FOR PUPILS

Equity Object: Current Operating Expenditure Per Pupil
Equity Measure: Restricted Range

The equity object in this case, *current operating expenditure per pupil*, is a descriptive heading under which the basic operating expenses of a school district are grouped, including classroom instruction costs and the various support services. It is almost all encompassing—the expenditures are made from the aggregate of local property tax revenue, state membership aid, state special and categorical aid, and federal categorical aid.

Again, because the restricted range is a measure highly susceptible to inflation, the dollar figures presented here are price-adjusted with 1988-89 as the base year.

In examining the graph on the opposite page, we find a trend line not unlike the trend line we found when using local + state membership aid as the equity object. Other than for a slight dip between 1984-85 and 1985-86, we find the restricted range increasing consistently over the thirteen-year period—*almost doubling in constant dollars* between 1976-77 to 1988-89, from $1,427 to $2,678. The gap is quite wide to begin with and continues to widen over the course of the thirteen years. The evidence seems quite clear; using current operating expenditures as the object and the restricted range as the measure, horizontal equity is worsening. Expenditure disparities are increasing.

Still, the picture may not be quite as clear as it seems. The inclusion into the mix of special and categorical aid—from both state and federal sources—suggests that there should be and will be increased disparities in expenditures among districts. That is, under our notions of vertical equity, districts with higher incidences of special needs pupils should be receiving additional dollars if the specials and categoricals are working properly. However, we don't know from this picture whether the consistent increases in the restricted range are due to the state's and the federal government's attention to vertical equity or result simply from a worsening situation in terms of horizontal equity. We suspect that both factors are at work. Indeed, the special and categorical aid may simply be working to ensure that the gap doesn't get wider—a sort of "bogus" horizontal equity. It would be informative to know whether the restricted range would increase or diminish if we removed the expenditures supported by special and categorical aid. Unfortunately, we don't have available the data to address this directly. However, we do offer some tentative findings later in discussing the relationship between SEV per Pupil and Current Operating Expenditures per Pupil.
Current Operating Expenditure Per Pupil

Restricted Range

<table>
<thead>
<tr>
<th>Year</th>
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HORIZONTAL EQUITY FOR PUPILS

Equity Object: Current Operating Expenditure Per Pupil
Equity Measure: Federal Range Ratio

The use of the federal range ratio as the equity measure produces a picture only slightly different from what we saw when using the restricted range as the equity measure. The situation generally has worsened over the thirteen-year period, that is, we have moved further and further away from the goal of reducing expenditure disparities. In the beginning year of the period, 1976-77, the ratio was 0.624; in the final year of the period, it had risen to 0.941.

We do find a short reversal of the trend line beginning in 1983-84 and carrying through to 1986-87. But then, beginning in 1986-87, the trend returns to one of rather sharp increases.

Horizontal equity, in terms of current operating expenditures per pupil as measured by the federal range ratio, is becoming a goal ever further from attainment. Expenditure disparities, rather than decreasing, are rather consistently increasing. In 1988-89, the district at the 95th percentile was spending almost 100% more in constant dollars than the district at the 5th percentile; in 1976-77, that difference amounted to only 60% more.
Current Operating Expenditure Per Pupil

Federal Range Ratio

<table>
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<tr>
<th>Year</th>
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<th>'78-79</th>
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HORIZONTAL EQUITY FOR PUPILS

**Equity Object:** Current Operating Expenditure Per Pupil  
**Equity Measure:** McLoone Index

Using the *McLoone index* as the equity measure against *current operating expenditure per pupil* presents a less positive picture than when we used it against local + state membership aid. In the latter case, the period ended better than it began. In the present case, we find greater expenditure disparities in the bottom half of the distribution at the end of the period, 1988-89, than we find at the beginning of the period, 1976-77. Again, in terms of horizontal equity, things seem to have gotten worse.

However, as we noted in the prior section, the picture may not be quite as clear as it seems. The inclusion into the mix of special and categorical aid—from both state and federal sources—suggests that there should be and will be increased disparities in expenditures among districts. That is, under our notions of vertical equity, districts with higher incidences of special needs pupils should be receiving and spending additional dollars if the specials and categoricals are working properly. However, we don't know from this picture whether the decreases in the McLoone index are due to the state's and the federal government's attention to vertical equity or result simply from a worsening situation in terms of horizontal equity. Again, we suspect that both factors are at work.
Current Operating Expenditures Per Pupil

McLoone Index

<table>
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EQUALITY OF OPPORTUNITY FOR PUPILS

Equity Object: Current Operating Expenditures Per Pupil
Equity Measure: Correlation Coefficient

We have seen in an earlier section a clear indication of a positive, strong, and increasing relationship between state equalized valuation per pupil and basic revenues per pupil, i.e., local + state membership aid. This indicates that a "suspect" factor, local tax wealth, has a strong and growing influence on the per pupil revenues available to local districts. What is the case when we look at current operating expenditures per pupil? Do we find the same or a different picture?

The bad news, in a sense, is that we find generally the same picture. There is a positive and somewhat strong relationship between tax wealth per pupil and current operating expenditure per pupil, particularly in the final year of the period where the correlation coefficient reaches 0.62. And the trend is generally upward, i.e., away from equality of opportunity. The wealthier the district, in terms of its tax base, the higher the per pupil expenditure level.

But there also appears to be some good news. Remember that current operating expenditures per pupil include almost all the expenditures of a local district—expenditures from local + state membership aid revenues, state special and categorical revenues, and federal categorical revenues. Because districts with high needs tend also to be districts with relatively low per pupil tax bases, the inclusion of these added dollars—mostly marked for high needs districts—might be expected to result in appreciably lower correlation coefficients (the "bogus" horizontal equity mentioned earlier).

And we do find this. The correlation coefficients in this instance are from 0.17 to 0.28 points lower than those found in the case of local + state membership aid. In this sense then, we might say that the inclusion into the mix of state and federal categorical aid gives evidence of attention to our third equity principle, i.e., vertical equity. Districts with high incidences of pupils with special needs appear to be receiving additional dollars to meet these needs. Whether the additional dollars are adequate to fully meet these needs remains an unanswered question.

Still, lest we forget, these districts, with their low per pupil property tax bases, start out on an uneven playing field and a playing field that is getting increasingly uneven over time.
Current Operating Expenditure Per Pupil
Correlation Coefficient (with SEVpp)

<table>
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<tr>
<th>Year Range</th>
<th>Correlation Coefficient</th>
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<tr>
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<td>87-88</td>
<td>0.550</td>
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<td>88-89</td>
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HORIZONTAL EQUITY FOR PUPILS

Equity Object: Instructional Staff Per 1,000 Pupils
Equity Measure: Restricted Range

With this equity object, instructional staff per 1,000 pupils, we move away from looking exclusively at dollars per pupil—but they revenues or expenditures—and begin to look at what the dollars buy. One thing dollars buy, of course, are classroom teachers and instructional staff to support the work of classroom teachers. Instructional staff represent perhaps the most important human resource that is brought to bear on the schooling of children and young people. How is this vital human resource distributed among Michigan’s school districts? In terms of strict horizontal equity, we would expect to see little or no difference in instructional staff per 1,000 pupils. What do we find?

We find that there is a considerable spread in instructional staff per 1,000 pupils between the district at the 95th percentile and the district at the fifth percentile. In the beginning year of the period, 1977-78, this difference (the restricted range) was 18. The district at the 95th percentile had 56 instructional staff per 1,000 pupils; the district at the 5th percentile had 38 instructional staff per 1,000 pupils. Certainly, at least in a strict sense, horizontal equity was lacking.

But what happened over the ensuing years? Did the situation get better or worse? With some minor fluctuations, it essentially stayed the same. There was some improvement in the first three years with the values moving down from 18 to 16 to 15; but then in 1980-81 the trend reverses itself, moving back up to 16 and then to 19 in 1981-82. It fluctuates between 19 and 18 for the next several years and dips down in the final year to 17. Thus, while there continues to be a sizeable gap, the gap is no larger at the end of the period than it was at the beginning of the period—indeed, its slightly smaller.

Again, we probably need to be somewhat cautious in drawing conclusions, for the picture may not be quite as clear as it seems. We have not accounted for the probability that special and categorical aid from the state and the federal government have enabled a good number of districts to increase the number of instructional staff per 1,000 pupils. Does that account for the gap? We suspect not. As we noted in a previous section, the special and categorical aid may simply be working to ensure that the gap doesn’t get wider—a sort of "bogus" horizontal equity. It would be informative to know whether the restricted range would increase or diminish if we removed the instructional staff members supported by special and categorical aid. Unfortunately, we don’t have available the data to do this.
Again, as we saw in the prior section, the use of the federal range ratio as the equity measure produces a picture not altogether unlike what we saw above when using the restricted range as the equity measure. While the present graph depicts a trend line that is far from identical to the last graph, it does seem to "track" onto the trend line we saw above when using the restricted range as the equity measure. However, there are much sharper fluctuations, particularly in the final years of the period.

There was improvement in the first three years with the values moving down from 0.474 to 0.400 to 0.366; but then in 1980-81 the trend reverses itself, moving back up to 0.400 to 0.487 and then to 0.514 in 1982-83. It drops slightly in 1983-84, bounces up in 1984-85, and then begins a downward trend in the remaining years of the period, reaching its low point, 0.395, in the final year. Thus, the period ends up better than it started. If our values call for little or no spread among school districts in instructional staff per 1,000, the bad news is that there is a sizable spread; the good news is that the spread is not increasing.

Again, for those whose values also support notions of vertical equity, we don't know if special and categorical funds are a major cause of the spread (a desired end) or a major cause of the spread not being larger (an undesired end).
### Instructional Staff Per 1,000 Pupils

**Federal Range Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>76-77</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
<th>80-81</th>
<th>81-82</th>
<th>82-83</th>
<th>83-84</th>
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<tbody>
<tr>
<td>Ratio</td>
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<td>0.400</td>
<td>0.366</td>
<td>0.400</td>
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HORIZONTAL EQUITY FOR PUPILS

**Equity Object**: Instructional Staff Per 1,000 Pupils  
**Equity Measure**: McLoone Index

In this instance, the picture in the bottom half of the distribution (what the *McLoone index* measures) is quite similar to the picture in entire distribution (what the restricted range and federal range ratio measure).

In short, a spread exists in the bottom half of the distribution, it fluctuates over the twelve year period in a pattern similar to that produced in the entire distribution when using the federal range ratio, and the spread is smaller at the end of the period than at the beginning.

Again, we need to remember that the McLoone index weights more heavily equity objects at the lower end of the distribution. It is a measure attractive to those who are particularly interested in reducing disparities among the bottom half of the distribution. In the present case, we find that the disparities in instructional staff per 1,000 pupils in the bottom half essentially mirror the disparities in the entire distribution—they are no better or no worse.
Instructional Staff Per 1,000 Pupils

McLoone Index

Year

Statewide

Instructional Staff Per 1,000 Pupils

McLoone Index

<table>
<thead>
<tr>
<th>Year</th>
<th>76-77</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
<th>80-81</th>
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EQUALITY OF OPPORTUNITY FOR PUPILS

Equity Object: Instructional Staff Per 1,000 Pupils
Equity Measure: Correlation Coefficient

The use of the correlation coefficient allows us to determine whether a "suspect" factor, in this case state equalized valuation per pupil, is having an influence on the distribution of an equity object, instructional staff per 1,000 pupils. Remember, in theory, strict equality of opportunity calls for a zero value on the correlation coefficient. In reality, as we noted earlier, such a situation is unlikely. Thus, we are more interested in seeing decreases in this value over time. Decreases will represent movement toward horizontal equity; increases will represent movement away from horizontal equity.

Is the relative tax wealth (SEV/pupil) of a district related to how many instructional staff per 1,000 pupils the district has available? If so, is the situation getting better or worse over time?

What do we find? Over the twelve-year period, there indeed is a positive relationship between SEV/Pupil and instructional staff per 1,000 pupils. And the correlation coefficients do increase over the twelve year period, growing from 0.27 in 1977-78 to 0.54 in 1988-89. The 0.54 coefficient indicates the presence of a relatively strong positive relationship. The relative tax wealth of a district does have a decided influence on how many instructional staff per 1,000 pupils a district will have available. In this instance, as in the instances of both basic revenues per pupil and current operating expenditures per pupil, the trend line is quite clear. Equality of opportunity has worsened over the twelve year period.
Instructional Staff Per 1,000 Pupils

Correlation Coefficient (with SEVpp)

<table>
<thead>
<tr>
<th>Year</th>
<th>76-77</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
<th>80-81</th>
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<td>0.474</td>
<td>0.444</td>
<td>0.467</td>
<td>0.543</td>
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PART II - SECTION D
TRENDS IN EQUITY FOR TAXPAYERS

HORIZONTAL EQUITY FOR TAXPAYERS

Equity Object: Levied Mills
Equity Measure: Restricted Range

In this section, we turn to the question of equity for taxpayers. Are there sizeable differences in the operational millage rates levied among Michigan's 520 plus K-12 districts? Have the differences increased or decreased over the thirteen-year period? Strict horizontal equity, of course, would dictate that there be no differences in operational millage rates.

In this instance, before looking at the restricted range (the difference between the district at the 95th percentile and the district at the 5th percentile), it may be helpful to first examine the range (the difference between the district levying the highest millage rate and the district levying the lowest rate). In 1976-77, the range was 31.2 mills—the highest district was levying 39.6 mills and the lowest 8.4 mills. By 1988-89, the range had increased to 41.8 mills—the highest district was levying 48.2 mills, the lowest 6.4 mills.

When we discount the extremes and look only at the restricted range, the differences don't appear quite as excessive. In 1976-77, the restricted range was 13.7 mills. The district at the 95th percentile was levying 35.7 mills; the district at the 5th percentile, 22.0 mills. However, in the next three years, the spread increases to 16 mills but then, through the remainder of the period, tends to level off bouncing back and forth between 15 and 16 mills.

Thus, we might conclude that the restricted range has tended to stabilize over the last nine years of the period. However, we ought to temper this finding with the finding that, over the full thirteen-year period, the range has increased by almost 2 mills. In terms of horizontal equity as measured by the restricted range, sizeable differences in operational millage rates do exist and over the full period these differences have increased by almost 2 mills—or some 13%.

Some will argue, and rightly so, that the Michigan school aid formula is not designed to produce identical operational millage rates. On the contrary, it leaves the choice of millage rates to the voters in local school districts. In theory, those who choose to levy higher millages, will realize higher revenue levels. Thus, we might well expect to see differences in millage rates. Still one might ask two questions. First, should we be willing to accept a restricted range as great as 15 mills (or some 41 mills if we use the range)? Second, do higher millages in fact result in higher revenues per pupil? The first question depends on our values or preferences for what should be or not be. The second question is empirical and can be answered in straight-forward fashion. As we demonstrate on pages 44-45, the answer is no.
HORIZONTAL EQUITY FOR TAXPAYERS

Equity Object: Levied Mills
Equity Measure: Federal Range Ratio

The federal range ratio presents a picture not unlike the restricted range. After a sharp upturn in 1979-80 and a resultant movement away from horizontal equity, the trend reverses itself and—e ven with a few bounces upwards—generally moves towards increased horizontal equity through the remainder of the thirteen year period. The period ends on a slightly more equitable note—moving from a federal range ratio of 0.62 in 1976-77 to 0.58 in 1988-89.

Still the differences in operational millage rates are sizeable. The district at the 95th percentile is levying 42.0 mills, 58% more than the district at the 5 th percentile (26.6 mills). We might raise again the question of whether we are willing to accept as equitable a federal range ratio of 0.58 when it comes to millage levied for operational purposes.
Levied Mills

Federal Range Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>76-77</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
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<tr>
<td>Ratio</td>
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<td>0.582</td>
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</table>
HORIZONTAL EQUITY FOR TAXPAYERS

Equity Object: Levied Mills
Equity Measure: McLoone Index

The McLoone Index presents an interesting picture. First, the index itself is relatively high, fluctuating between 0.86 and 0.90. This would seem to suggest the presence of a good deal of horizontal equity. Remember that the McLoone Index is scaled differently than the other measures; an index of 1.0 represents perfect horizontal equity.

Second, remember also that the McLoone Index is looking only at the differences or spread in the bottom half of the distribution—in this case, the bottom 50 percent of all districts ranked from high to low on operational millage rates. Which are the districts that fall in the bottom half of the distribution of millage rates? Are they the same ones that fall in the bottom half on revenues per pupil or expenditures per pupil? If they are, then the school aid formula is working as it is intended. If they are not, then one of the stated objectives of the program—namely, higher millages produce higher revenue levels—is falling short of attainment.

Consequently, in this case, a straight-forward interpretation of the McLoone Index may be misleading. We may have high revenue and expenditure districts with small differences in millage rates falling in the bottom half of the distribution. Relatively lower revenue and expenditure districts with both higher millage rates and a greater spread in the rates may comprise the upper half of the distribution. Thus, considerable caution is dictated in interpreting these findings.

This brings us again to the question we raised in discussing levied mills measured by the restricted range, namely, do higher millages in fact result in higher revenues per pupil? We address this question in the next section.
Levied Mills
McLoone Index

<table>
<thead>
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<th>Year</th>
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EQUALITY OF OPPORTUNITY FOR TAXPAYERS

**Equity Object**: Levied Mills  
**Equity Measure**: Correlation Coefficient

Here we turn to the question we raised in the previous section, namely, in general and across the State of Michigan, do higher millages in fact result in higher revenues? Are local taxpayers being treated equitably? That is, if they choose to levy higher millages does this result in higher revenues per pupil?

To answer this question, in addition to levied mills as the equity object we also need to bring into play local + state membership aid as a second equity object. We are interested in the nature of the relationship between the two, thus we use the correlation coefficient as the measure.

However, in contrast to examining equality of opportunity for pupils, we are not interested in this instance in finding no relationship or a diminishing relationship over time. Rather, we want to know if there is a positive relationship, i.e., for the state as whole, as levied mills increase does local + state membership aid also increase? Thus, in this instance, we would be looking for high correlations and/or an increase in the correlation coefficients over time. (To remain consistent with the other charts, i.e., that movement toward the horizontal axis represents movement toward equity, we have "flipped" the scale on the vertical axis.)

In 1976-77, we find that the correlation coefficient was quite high, 0.77, indicating a fairly strong positive relationship between levied mills and local + state aid membership per pupil. Very definitely, as a district levied higher millages higher revenues per pupil were a result. A "rule of thumb" for interpreting the correlation coefficient is to square the coefficient with the resulting product being the percent of change in the dependent variable (local + state membership aid) accounted for by the independent variable (levied mills). Thus, in 1976-77 squaring the coefficient of 0.77 results in 0.59—that is, across the state, 59 percent of the differences among districts in local + state aid per pupil was accounted for by the differences in levied mills.

However, in the following year the correlation coefficient decreased and, after a slight bounce back in 1978-79, it generally decreased quite rapidly over the next 10 years. It reached its low point of 0.05 in the final year of the period, 1988-89. Squaring 0.05 produces a product of .003; less than one percent of the differences in local + state membership aid per pupil are accounted for by differences among districts in levied mills. Put another way, in 1988-89 factors other than levied mills accounted for 99 percent of the differences in local + state membership aid per pupil.

Assuming that higher millages should be accompanied by higher revenues, equity for taxpayers has been seriously eroded. Higher millage districts in general have not enjoyed higher revenues per pupil as a result of their greater tax efforts. And the situation continues to worsen.
Summarizing the Findings

The major question we have sought to address in this paper is whether, over the past thirteen years, Michigan's school finance system is becoming more or less equitable in its treatment of both pupils and taxpayers. The preceding pages offer a series of findings, a series of answers to this question. In an attempt to summarize these several findings and the surrounding discussion of the findings, we offer the table below.

We trust that the summary information in the table corroborates our own conclusion, namely, school finance equity in Michigan, in terms of almost any equity object, any equity principle, and any equity measure has worsened over the past thirteen years for both pupils and taxpayers.