

DOCUMENT RESUME

ED 258 788

RC 015 370

AUTHOR Augenblick, John; Nachtigal, Paul M.
 TITLE Equity in Rural School Finance.
 INSTITUTION Department of Education, Washington, DC.
 PUB DATE 15 Jul
 NOTE 30p.; Paper presented at the National Rural Education Forum (Kansas City, MO, August 12-14, 1985). For related documents, see RC 015 364-372.
 PUB TYPE Information Analyses (070) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Community Resources; *Educational Equity (Finance); *Educational Finance; Educational Needs; Elementary Secondary Education; Finance Reform; *Fiscal Capacity; *Information Needs; *Rural Education; School District Spending; School Support; *Small Schools

ABSTRACT

Rural education is characterized by diversity, isolation, and small enrollments. Because of these characteristics, equity in rural school finance is very difficult to achieve. Lacking a workable taxonomy which can accommodate the variations in rural reality, there is neither the information to accurately assess the adequacy of educational programs in small rural schools nor the ability to judge the capacity of rural communities to support adequate educational programs. Although rural schools comprise approximately three-fourths of the nation's school districts and enroll approximately one-third of the student population, this lack of information and inability of the rural constituency to coalesce into a viable political force means rural education has received little, if any, special attention from past school finance reform initiatives. Traditionally, states have acknowledged the "overburden" argument in the funding of rural schools which recognizes the higher per pupil costs related to small size. Recent school reform legislation, mandating additional courses and student and teacher evaluation programs, has added significantly to rural "overburden." Until we can assemble a data base on the real educational needs of rural communities and their ability to support those programs, debate about equity of rural school finance can only proceed at the emotional, political level. (Author/NEC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED258788



Equity In Rural School Finance

John Augenblick

Augenblick/Van de Water & Associates

Paul M. Nachtigal

Mid-continent Regional Educational Laboratory

July 15, 1985

National Rural Education Forum

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This report has been reproduced as
accurately as possible from the original document.

This report has been reviewed and
found to be of high quality.

This report was prepared by the
U.S. Department of Education.

RC 015370

Equity In Rural School Finance

John Augenblick
Augenblick/Van de Water & Associates

Paul M. Nachtigal
Mid-continent Regional Educational Laboratory

July 15, 1985

Paper prepared for the U.S. Department of Education 1985 National Rural Education Forum held in Kansas City, Missouri, August 1985.

The subject of this publication was supported in whole or in part by the United States Education Department. The opinions expressed herein do not necessarily reflect the position or policy of the United States Education Department; no official endorsement by the United States Education Department should be inferred.

ABSTRACT

Rural education is characterized by diversity, isolation and small enrollments. Because of these characteristics, equity in rural school finance is very difficult to achieve. Lacking a workable taxonomy which can accommodate the variations in rural reality, there is neither the information to accurately assess the adequacy of educational programs in small rural schools nor the ability to judge the capacity of rural communities to support an adequate educational program. Given this lack of information and the inability of the rural constituency to coalesce into a viable political force, rural education has received little if any special attention from the past school finance reform initiatives.

Traditionally, states have acknowledged the "overburden" argument in the funding of rural schools which recognizes the higher per pupil costs related to small size. Recent school reform legislation has tended to add significantly to this rural "overburden". Additional courses are being required, resulting in lower pupil/teacher ratios. Student testing and teacher evaluation programs are being mandated. How can these additional educational services and accountability be supported? What are the true costs of a quality education program in a minority community in the Deep South? In a farm community in the Upper Mid-west? In a Hispanic community of Northern New Mexico?

Until we can assemble a data base on the real educational needs of rural communities and their ability to support those programs, the debate about equity of rural school finance can only proceed at the emotional, political level.

Equity in Rural School Finance

Introduction

A computer search of the ERIC Clearinghouse on Rural Education and Small Schools identified 38 citations around the descriptors of "equity in rural school finance." Approximately half of the citations are over 5 years old. Only three of the pieces have been written since the "Nation at Risk" sparked the latest wave of school reform. The authors of these documents articulate nicely the unique characteristics of rural education which have implications for financing rural schools, e.g. its diversity, isolation, and small enrollments. What is lacking, is the necessary data base of information concerning the true costs of providing "equal access" to educational services regardless of where in rural America these students might reside. Also lacking, is information about the basic wealth of rural communities, which would enable a more exact determination of their ability to support an adequate educational program.

In a 1980 paper, "School Finance in Rural Education", James D. Jess concluded rural schools are facing major problems in financing today (because) (1) school reforms have generally failed to address the specific needs of rural and small schools, (2) researchers have failed to recognize small school differences in their collection, classification and analysis of data; and (3) state governments have not faced the complexity of school finance problems in rural school districts. Much the same could be written today.

In October of 1983, the Department of Education issued a policy statement "Rural Education and Rural Family Education Policy for the 80's". This statement also recognized the need for a "data base

on the condition of education in rural areas...". Until such a data base exists, one can do little more in an analysis of the issues related to the "equity of rural school finance" than interpolate from what is known about recent school finance reform generally and what is commonly understood about the nature of rural education by those who work in the field. This and some speculation on the part of the authors about the likely impact of the latest wave of school reform on the financing needs of small rural schools constitute the remainder of this paper.

Before moving into the discussion, it is useful to remind us all of the size and changing nature of the problem. Depending on how one defines "rural" and "small", (Herein is one of the major roadblocks to creating a useful data base. An adequate taxonomy of rural education does not exist which could accommodate the diversity which characterizes small rural schools.) we are talking about approximately 3/4ths of the schools districts of the country, which enroll approximately 1/3rd of the student population. The Condition of Education, 1983 Edition, NCES, p.26, reports 36.4% of the nations districts enrolling fewer than 300 students; 28.1%, 300-499; 21.9%, 500-799; 5.3%, 800-999; and only 8.2% of the districts with 1000+ students. While tighter fiscal conditions have renewed the concern for cost efficiencies, further school consolidation, the traditional response to such problems, is not likely to change these percentages significantly. Nebraska, the last major holdout to consolidation, recently approved a "historic" school-consolidation bill which will require small elementary-only rural schools to either merge or affiliate (retain its own local board and pay a levy for high school use) by 1989. This could reduce the

number of the nations school districts from approximately 15,500 by about 300. Since this is the last state to embark on a major consolidation effort any additional reductions are likely to be small, therefore limiting the traditional consolidation strategy as a way of addressing the equity problem in financing rural schools.

Equity Across Rural Schools

There are two important dimensions to the question of equity in rural school finance. The first is the equity of financial resources and ability to support public schools across rural districts both within a given state and across state lines. In Nebraska where the consolidation bill was passed on a tax equity issue, the critics of the small elementary districts charged... "that they are 'tax havens', where levies vary from 30 cents per \$100 of valuation on one side of the road to \$3 on the other side." At the National level, few would argue that traditionally, the "farm rich" communities of central Iowa were/are better able to support their schools than the minority communities of the Deep South or the rural barrios of the Southwest. It is also clear that the current world "energy glut", the rapid deterioration of the agricultural economy, and efforts to find ways to balance the federal budget have added new complexities to the rural school finance equity issue.

In recent years, states like North Dakota, Oklahoma and Texas tied the financing of education tightly to the severance tax on energy production. The resources generated by this tax have declined markedly with the drop in demand for coal and oil related products. Agricultural land values in Iowa have dropped as much as 50% according to Neil E. Harl professor of agriculture and economics at Iowa State

University. While other states have been affected less dramatically, through out the farm belt major changes in school finance legislation will be needed if public schools in rural communities are to be kept solvent.

In other parts of the country, proposals on the part of the federal government to cut back payments in-lieu-of-taxes on federal forest land could reduce the revenue received by the participating states by \$364 million in fiscal year 1986. (School Board News, June 14, 1985) This money is typically shared on a 50/50 basis between roads and schools. It is predicted that some districts could be faced with as much as a 39% budget cut if these reductions were to be approved.

Equity Between Rural and Non-rural Schools

In addition to the inequities which exist across rural school districts themselves, there is the problem of finance equity between rural school districts and non-rural districts. This is where the traditional battle lines are drawn in the drafting of school finance legislation at the state level. Lacking procedures for determining the true costs of equal education opportunity, decisions about finance formulas are likely to be influenced by political considerations as well as rational arguments. And, as the political power has shifted from rural to urban with-in state legislatures, the inclination for finance legislation to favor the non-rural areas has increase.

It is the balancing of school finance formulas which is at the heart of efforts to achieve educational equity. A discussion of school finance reform follows.

School Finance Reform

School finance reform has been going on in this country for 80 years. For many people, the decade from 1968 to 1978 represents the high point of school finance reform. During this period the courts heard a plethora of cases, tremendous growth in research was stimulated by federal and foundation funds, and diverse groups worked together in an appropriate political environment. In addition, the availability of state funds fueled substantial changes in the structure of state school aid systems. School finance systems became more complex in an attempt to make the distribution of state aid more sensitive to characteristics of pupils and school districts that affect the cost of providing education services.

A primary purpose of school finance reform was to equalize the resources available for education across the numerous school districts of each state. For some, this meant that per pupil spending should be the same in all districts; however, today, may feel that there are legitimate expenditure variations among school districts. School finance reform had many other objectives in addition to resource equity, some of which were more explicit than others. Taxpayer equity was a major objective; while reducing property taxes became the primary method of achieving this goal, states improved their property assessment systems, implemented property tax circuit breakers, developed new ways of measuring the fiscal capacity of school districts, and limited the expenditure and tax authority of school districts. Another objective of school finance reform was to assure that adequate resources were available for education; states developed sophisticated indicators of need, more carefully measured the excess

costs of serving special pupil populations, studied geographic price differences and began to define "basic" education and its costs.

During the last five years, expenditures for public schools have grown from \$86.2 billion to over \$126.8 billion. Current expenditures per pupil in average daily attendance (ADA) have increased from \$1,917 to \$3,173, a change of nearly 66 percent (National Education Association 1983 and 1979). This increase has outstripped inflation despite the fact that spending for public schools is declining as a proportion of the Gross National Product and total personal income. Wide variations exist in the average per pupil spending levels of the states. In five states (Alaska, Connecticut, New Jersey, New York, and Wyoming), spending exceeds \$4,000. In five states (Alabama, Arkansas, Mississippi, Tennessee, and Utah), spending is less than \$2,300. Some of these differences reflect price variations, the influence of school size, and service differences among other things.

One of the most obvious changes that has taken place during the last five years is the increase in state support for education, despite the dire condition of many states' budgets. In 1981 and 1982, state budgets were particularly weak. Actions taken in 1982 and 1983 to deal with state fiscal problems tended to increase state revenues and to reduce state spending in areas other than elementary/secondary education. State support for public schools has become a much more important part of state budgets, despite the fact that between 1978 and 1983 there was only a slight increase, from 34.5 to 35.4 percent, in the average percentage of all state expenditures devoted to public schools. In 1983, support for public schools consumed over 40 percent of state general fund expenditures in 12 states; in 1978, school aid

consumed more than 40 percent of state general fund expenditures in 15 states and required less than 30 percent of such expenditures in 15 states (Augenblick and Van de Water 1983).

In 1984, on average, states provided 49 percent of all revenue for public schools; in 1979, the states provided 47.3 percent of all revenue. The variation among the states in the percentage of revenue provided by the state is narrowing. A few states still provide a very low percentage of funds; in Nebraska, New Hampshire, Oregon and Wyoming, the state provides less than 30 percent of all school revenues. In Alaska, Hawaii, Kentucky, New Mexico and Washington, the state provides more than 70 percent of all school revenue (National Education Association 1983 and 1979). The steady increase in the proportion of all school revenues provided by states set the stage for some of the actions taken by states in the last year that increased their influence over the education system. In California, Florida, North Carolina and South Carolina, implementation of changes in teacher qualifications and pay was easier because the state provided the majority of all funds for education. Fundamental changes in the education system, at least those mandated by state legislatures, are more difficult to implement in states that provide a relatively small share of all school revenues.

Relative to income, state expenditures for public schools have decreased slightly over the past few years. Of the 26 states where state education support has decreased relative to income during the last five years, seven (Alabama, Illinois, Maryland, Massachusetts, New Hampshire, Rhode Island, and Wisconsin) provide low support relative to income while two (Delaware and Utah) provide high support. Of the 24

states where state support has increased relative to income, eight (Alaska, Hawaii, Idaho, Kentucky, New Mexico, Oklahoma, Washington, and West Virginia) provide high support relative to income while six (Connecticut, Missouri, Nebraska, Ohio, South Dakota, and Virginia) provide low support.

In 1984, the states provided 59 percent of the new funds available to public schools. However, variation in the proportion of the new funding attributable to the states exists. Ten states provided more than 100 percent of all new funds, indicating that increases in state aid exceeded increases in total support and that state aid made up for losses in other sources. In six states, state support accounted for between 75 and 100 percent of all new school aid. In 14 states, new state aid provided between 50 and 75 percent of all new support for schools. New state aid accounted for between 25 and 50 percent of new funds in 13 states. In seven states new state funds provided less than 25 percent of all new funds for schools.

Comparisons of these figures to those of earlier years indicate the growing importance of the states in providing support for schools: between 1978 and 1981, only 10 states provided over 75 percent of the new funds for schools; this number grew to 11 states for the period 1981 to 1982, 14 states for the period 1982 to 1983 and 16 states for the period 1983 to 1984. By the same token, there has been a decrease in the number of states providing less than 25 percent of the new funds for schools: between 1978 and 1981, 15 states were responsible for less than 25 percent of the new funds for schools, more than twice the number of states with that level of commitment in the period 1983 to 1984.

One of the most important stimuli of school finance reform in the 1970's was the reduction of property taxes. At the time, property taxes were the most unpopular of all taxes and most policymakers viewed them as regressive, placing a relatively higher burden on low income individuals. Dramatic increases in property values, in some cases linked to reassessment, combined with a perception that school expenditures were out of control, led to concern about the level of property taxes. Between 1973 and 1981, property taxes increased from \$36.7 billion to \$72.0 billion; however, despite this increase, property taxes declined from 15 percent of all government tax revenues to 11 percent. During the same period, property taxes decreased from 1.98 percent of market value to 1.26 percent of market value, on average. The figures in Table 1 indicate the annual growth in property taxes relative to other taxes between 1973 and 1981.

TABLE 1

ANNUAL RATES OF INCREASE IN DIFFERENT
TAXES BETWEEN 1973 AND 1981

	-----Type of Tax-----			
	<u>Property</u>	<u>Sales</u>	<u>State Income</u>	<u>Federal Income</u>
--Period--				

1973 - 1978	7.8%	12.3%	13.3%	11.9%
1978 - 1981	4.0%	9.6%	12.0%	16.4%

Source: Significant Features of Fiscal Federalism in 1981-82. Advisory Commission on Intergovernmental Relations: Washington, D.C., April, 1983.

In part, this reduction in property tax revenue resulted from limitations imposed on property assessments, restrictions on property tax rates or rate increases and controls placed on local government spending. Currently, 39 states use one or more types of limitations to control the spending and tax authority of local governments, including school districts. In 34 states, property tax collections are limited; in 13 states there are limits on property tax rates; in 11 states there are revenue or expenditure limitations; and in 5 states there are limits on property assessment increases. In addition, 32 states use circuit breakers to limit the burden of property taxation relative to family income, although in only seven of these states are all homeowners and renters eligible for the appropriate reduction (Advisory Commission on Intergovernmental Relations 1983.)

During the last five years, the changes made in school finance systems have been neither as fundamental nor as frequent as the changes made a decade ago. However, changes have occurred. Several states modified aspects of their school finance systems, three states responded to court requirements, and a few states provided funds aimed at improving the quality of the education system, although such funds were typically provided outside of school finance formulas.

Several other significant changes have been made by states to improve their school finance systems. Two states modified the way by which the relative wealth of school districts is determined: income as combined with property wealth in Vermont and Pennsylvania. Prior to 1980, Connecticut, Kansas, Maryland, Missouri, Rhode Island, and Virginia combined income and property in measuring the fiscal capacity of school districts. Three states incorporated "price indices" into

their formulas to recognize regional cost variations: Missouri, Ohio, and Texas. Alaska and Florida already used such a factor. Finally, a number of states initiated studies that may result in school finance changes in the future. Such studies have been undertaken in Alaska, Colorado, Illinois, Kentucky, Maine, Michigan, Montana, Nevada, New Hampshire, and Wisconsin.

A number of states have begun to provide large amounts of funds to improve the quality of education programs. In 1983, Mississippi, one of the first states to make such an effort, infused millions of new dollars into its education system with much of the new funds designed to increase services, lower pupil-teacher ratios, and raise teacher salary levels. In 1984, a number of other states, including several other southern states, began making improvements in their education systems. Tennessee, in a widely publicized effort, raised teacher salaries in an effort to attract highly qualified personnel, created a career ladder program for teachers as a retention incentive, provided funds for teacher aides, and funded a series of categorical programs designed to expand and improve education services. South Carolina passed legislation that increased high school graduation requirements, created a comprehensive pupil testing program, raised teacher salaries, provided fiscal incentives for teachers, administrators, and schools, and made other improvements. California, Florida, and Texas passed programs with similar components to improve education. Florida and Texas emphasized teacher pay and more state control over the education program while California provided incentives to lengthen the school year and expanded its support of school initiated improvement (Odden 1984).

Many other states created less comprehensive programs designed to promote school improvement by raising promotion and graduation standards; increasing teacher certification requirements; providing incentive funds for high performing teachers, administrators, or schools; strengthening the curriculum through more stringent requirements, textbook review, or curricular research; lengthening the school day or school year; increasing technical assistance; lowering pupil-teacher ratios; and so on. A portion of the funds supporting these efforts flow through traditional school finance formulas; many of the states making improvements in 1984 also expanded basic funding and funding of categorical programs. But much of the funding for the new, highly targeted efforts, particularly those focusing on teacher pay and fiscal incentives for high performance, was allocated outside of the equalization formulas used to provide the bulk of school support.

The most important change likely to occur in school finance is that states will begin moving away from simply reimbursing districts for previous expenditures. The public's increasing demand for accountability combined with more conservative fiscal management, will create the biggest challenge for school finance systems: to provide incentives for improvements in the efficiency and effectiveness of schools while assuring that resources, in terms of both "macro" objects such as money and "micro" objects such as curriculum or time, are distributed equitably. This balance may be difficult to achieve. However, the essence of school finance systems has always been balance; in recent years balance had to be achieved between statewide equity and local control. One thing is sure: states have not achieved the same balance between competing demands in the past and are unlikely to achieve the same balance in the future.

How State Formula Affect Rural Schools

David H. Monk et.al. in a paper "Potential Effects of the Overburden Argument on the Funding of Rural Schools", June 1981, state that the economies of scale which support the differential treatment of rural schools in finance formulas, can be traced to two sources. The first involves the difficulties which small organizations encounter when they seek to purchase small amounts of relatively indivisible inputs. This is most often characterized when a school district is forced to operate with smaller classes than it would prefer to offer. To the extent that student performance is not enhanced by the small class, there is a sense in which the teacher resource, because of its indivisible nature is being under-utilized. The second source of scale economies involves the gain in specialization that usually accompanies the increase in scale. To the degree that this specialization is associated with pupil gains, larger districts will be producing more than the smaller district for the same cost.

State aid systems have become complicated in the last few years in an attempt to improve their sensitivity to factors that affect the costs of providing education services and to assessing the capacity of school districts to pay their share of the costs. Numerous mechanisms are used to increase the sensitivity of formulas to the needs of small, rural school districts that face higher per pupil costs. It must be remembered, however, that state aid systems are designed to assess the relative needs of many school districts. Factors have also been built into formulas that make them sensitive to the needs of large, urban districts. While the existence of small size or rural factors helps to assure that such districts receive more state support than they would

in their absence, they may not assure that such districts receive adequate support. In addition, state aid systems have become somewhat more sensitive to the variation in the wealth of school districts that face the most difficult problems because they may not receive adequate state support and they may be unable to generate sufficient local support. It should also be recognized that state aid formulas are designed to allocate money. They often do not assure that money is capable of purchasing similar resources and they rarely take into consideration the fact that different school districts may offer different education programs.

Because of the large number of school districts in most states, state aid is distributed through a formula which is codified in state statutes but which can be amended as needed by the state legislature. Such a formula is used for several reasons:

- o It avoids the use of a negotiation process that would otherwise occur between each school district, or groups of districts, and the state legislature and the state education department.
- o It promotes equity among all school districts. While the factors that drive the formula can be changed from year to year, once they are established for a particular year, every district is treated in exactly the same way.
- o It is predictable. Once the formula is established, it is possible to calculate precisely how much state aid will flow to each district--if the formula does not change significantly, over time, each school district can estimate its state aid with some degree of accuracy.

Factors in the state aid formula are usually chosen to reflect the costs of delivering education services. Within the general aid formula (as opposed to the transportation or capital outlay/debt service formulas), states tend to consider characteristics of pupils, teachers, education programs, or of the school districts themselves

in determining the education costs faced by districts. Some of these characteristics include:

- o For pupils--handicapping condition, bilingual, need for compensatory education, grade in which enrolled, and minority or low income status.
- o For teachers--experience, level of training or subject area.
- o For education program--pupil/teacher ratios or type of program (special education, vocational education, kindergarten).
- o For school districts--size (enrollment level), geographic location (reflecting differences in prices), density, or organization (number of schools or grade level of schools such as K-8, 9-12 or K-12).

The particular factors used in a formula and the parameters that define the factors, determine to a large extent how much state support one district will receive relative to all other districts. Some factors can be particularly beneficial to small, rural school districts while others may favor districts with other characteristics. Because the allocation system is based on relative need, small districts can be hurt if there are no factors in the formula that reflect their needs while there are factors that reflect the needs of other types of districts. Many states provide greater aid to small districts through the use of size factors or parameters that recognize different pupil/teacher ratios for school districts of different size; many states also use factors to provide greater support to pupils in high school, which may reduce the aid available to small districts if they do not operate a high school. Even the way that pupils are counted in a formula, through the use of average daily membership (ADM) or average daily attendance (ADA), can affect the distribution of state support to small school districts. The use of an ADA count may favor small districts since they tend to have higher ratio of ADA to ADM relative to urban school districts.

One of the most important factors used in a state aid formula is the measurement of school district wealth. In most states, wealth is measured in terms of property wealth per enrolled pupil. Depending upon certain factors (such as whether all types of property are assessed at the same rates, whether agricultural property is assessed based on use or market value, exemption practices, circuit breaker design (a circuit breaker typically limits a tax payers property taxes to a designated percent of income, and so on), rural school districts may appear to be relatively wealthy or relatively poor compared to urban or suburban districts. Assuring that property wealth is "equalized" across all school districts is a particularly difficult task. The lack of uniform assessment practices, combined with the election of local assessors, usually results in widely varying ratios of market value to assessed value across the assessing jurisdictions of a state. Since it is costly and time consuming to undertake periodic market/assessment ratio studies, the state often uses whatever property values it receives in the formula. This may favor rural districts where there is less property turnover.

In a few states, factors in addition to property are used in determining the relative wealth of school districts. Income is used either additively or multiplicatively (for example, by multiplying property wealth by the ratio of a district's median income to the median income of the state) to modify property wealth. This can have the effect of reducing the relative wealth of rural and urban districts, which may have relatively low income levels. If the state aid system is very sensitive to district wealth, this can divert support away from suburban districts and toward rural and urban

districts, assuming a fixed total availability of state aid.

An additional factor of great importance in measuring the relative wealth of school districts is the pupil count used. While most states use the ADA or ADM pupil count, some states use weighted pupil counts, where the weights are designed to reflect the cost of providing education services. For instance, some pupils may be weighted at three or four times their ADA or ADM value to reflect the cost of their participation in a special education program that is three or four times as costly as a regular program. As the pupil count is raised, the relative wealth of the district is reduced. Thus, if the weights used in the formula only reflect the needs of certain types of pupils, particularly those that enroll in higher proportion in urban districts, urban districts will appear to be relatively poor compared to rural districts. Since state aid is distributed in inverse relation to wealth, urban districts would receive a larger relative share of all state aid.

The very nature of a state aid system can be significant factor in determining the relative distribution of state support. The earliest state aid systems used flat grants and were not sensitive to either school district needs or their relative wealth. Under this approach, every school district received the same amount of state aid per pupil, or per teacher or per classroom unit. In many states, today, a flat grant continues to be a component, although usually a relatively small one, of the state aid system. A flat grant per pupil will favor larger school districts since it is not sensitive to the higher per pupil costs usually found among school districts. Most states use a foundation program approach in distributing the major portion of

general support. Under this approach, the state establishes a foundation level, usually in per pupil or per classroom unit terms, and provides as state aid the difference between the foundation level and the amount raised by each school district at a specified, uniform property tax rate. If the foundation level is constant for all school districts (some states use more than one level depending on the size of the district), and it is expressed in per pupil terms, state aid may be distributed in favor of large school districts. If the foundation level is constant but expressed in per classroom unit terms and the state permits smaller school districts to qualify for more classroom units, such a system can be sensitive to the needs of small school districts.

In some states, the foundation level or the required local tax effort may be different for elementary and secondary school districts. Depending on the proportional relationship between foundation level and required local effort, this can help or hurt small school districts, particularly those offering only elementary school programs. In some states, aid may be provided on a matching basis; that is, aid is made available in direct proportion to the tax effort undertaken by the local district. Such systems, variously referred to as district power equalizing or guaranteed tax base systems, allocate more aid to relatively poor districts making the same tax effort as wealthy districts but more aid to districts of similar wealth that have higher tax rates. Such approaches are often used in conjunction with foundation programs, although in a few states they operate independently. This approach often works against relatively poor school districts since it is more difficult for them to increase their

tax efforts. However, this approach may work in favor of smaller districts if the proportion of the total population with children in school is higher, making it easier to vote tax increases, than it is in larger, urban districts.

Almost all state aid formulas operate in conjunction with special features designed to assure the distribution of state aid to politically important school districts (often the large, urban districts with powerful legislative representation) or to control education expenditures or property tax rates. Most often grandfather or save-harmless provisions assure that relatively wealthy districts continue to obtain state aid while tax and budget restrictions limit relatively poor or relatively low spending school districts from increasing their revenue levels, even where the state aid system recognizes the need to do so. In these cases, again, being small in size may not result in less state support although being poor or having a history of spending less (because in the past state aid systems were not sensitive to real needs) may result in a loss of aid. Small, rural school districts not only must assure that the formula for allocating state aid is sensitive to their needs, but that the system does not penalize them for past behavior.

Policy Initiatives for School Improvement; Implications for Rural Schools

As the result of "Nation at Risk" and the series of reports that followed, states across the country have, and are continuing to pass, school improvement legislation which greatly exacerbates the "overburden" of small rural schools. Mandating additional courses in foreign language, advanced mathematics and science, with a stable or

declining student population, will result in even smaller classes; the student/teacher ratio will be even less cost effective, if we continue with the traditional educational delivery systems. Likewise, efforts to improve quality by requiring stricter teacher certification standards will add to the difficulties already experienced by small schools with specialization.

School reform legislation is also adding to the two traditional sources of "overburden" discussed above. Districts are now being asked to add additional functions to the organizational routines of schooling. Some states are now requiring that districts develop a written curriculum for all courses and all grade levels where none existed before. A part of most reform legislation is the expansion of testing programs to monitor student progress. There are efforts in most states to require the implementation of teacher and administrator evaluation programs. Career ladder programs are being encouraged as a way of rewarding quality teaching performance. Developing and or implementing the above programs require additional financial support which is seldom adequately provided with the new legislation. And, even if funds are available, adding these chores to administrators that are already performing multiple assignments or teachers that have four, five or six different preparations a day is not likely to result in satisfactory outcomes. Clearly some imaginative funding and implementation strategies will be needed if these policies are to result in the improvement of rural education.

One of the more positive notions, which is a part of some reform legislation, is the creation of discretionary funds for which districts can apply to develop new programs or procedures which might contribute

to the quality of the school experience. Even here, small rural schools are likely to find themselves at a disadvantage. As with the old ESEA Title III program, later Title IV-B, applying for such funds requires time and expertise which are often in short supply in rural school districts.

At the same time additional demands are being made of the public schools to improve the quality of education, the decline of the farm economy and the shrinking resources from energy development has caused the tightening of budgets at both the state and local level. As states attempt to find ways of making more efficient use of the education dollar; the size of school districts and the various weighting provisions which provide additional funding for small attendance centers are being re-examined. Urban oriented legislators are inclined to want to eliminate such provisions, thus encouraging if not requiring additional reorganization. If such attempts are successful and if the resultant policy does not take into account those schools that must exist because of isolation and sparsity of population, the inequities of educational opportunity will increase rather than decrease.

To add to the woes of rural schools are the dire predictions of the coming teacher shortage. According to the recent Rand study "Beyond the Reports; The Coming Crisis in Teaching", The National Science Teachers Association estimates that 300,000 new mathematics and science teachers will be needed by 1995 - more than the total number of mathematics and science teachers currently teaching. With the traditionally lower salaries in rural areas, (A recent Colorado study showed experienced teachers making half as much as their urban counterparts. Denver Post, May 19, 1985) rural schools are ill

equipped to compete on the open market for quality teaching personnel. Competent leadership for rural districts is also predicted to be in short supply. Estimates in Colorado and Missouri suggest that as high as 80% of the state's school administrators will be retiring in the next 10 years.

If the above scenarios are fairly accurate concerning the trends of rural education, e.g. increasing demands, tighter budgets and often declining enrollments; and if because of distance or political desirability, further school consolidation is of limited usefulness as a strategy for solving the problem of rural equity, other options must be developed.

Michigan is one state where such an option was implemented over a decade ago. It is instructive to examine briefly what has happened in that state to understand the difficulties and complexities of achieving equity in school finance legislation. Prior to 1973, Michigan has used a "foundation program" approach. Since that date it has implemented a "guaranteed tax base" approach under which the state assures that districts with similar property tax rates can generate similar per pupil revenues. In addition, the state has expanded its "circuit breaker program" under which low income taxpayers are protected from high property taxes. Michigan's school finance system is not sensitive to the characteristics of small, rural schools; there are no adjustments for size. However, a district needing to spend more or desiring to do more, can obtain more state aid if it raises its own tax rate.

Despite its structure, the system has not dramatically improved equity in terms of either spending or program offerings. Rural schools

continue to spend less than suburban and urban schools despite the diseconomies they face. A major reason for this is that rural schools have not raised their tax rates while urban and suburban schools have. Today many small districts still have a 20 mill tax rate when the state wide average is almost 30 mills.

One can only speculate as to why this is. Do rural communities value quality education less than urban and suburban communities? It is true that educators are often the highest paid workers in rural communities. Is the fact that these comparisons can be easily made in small communities the reason? We know that rural communities tend to be more traditional, more conservative in their value systems. Is this the reason? Rural people tend to be more inclined to "make do", and the populations tend to be more stable. The collective community memory is perhaps more likely to support the position that it was good enough 15 or 20 years ago, it should be good enough today. From the perspective of the local community, the educational needs may be well met.

The state of Michigan further modified the finance formula last year by adding a \$28 per pupil incentive for districts willing to increase the number of periods in the school day from five to six. The fact is that most of the districts that had reduced the number of periods in the early 1980's had already restored them as the economy recovered. While rural schools were not particularly affected by this incentive, the question remains whether they will be able to respond as the state develops new incentives for programs or policies not currently being undertaken in rural schools.

In Summary

There are obviously a number of different ways to think about the issue of equity in rural school finance. There is equity from the

point of view of the tax payer; equity in terms of dollars spent; equity of program offerings; and equity as measured in student outcomes. One definition of equity is not always in harmony with all the others. Each is important. How should the conflict around these equity issues be resolved?

States are ultimately responsible for public education. The one direct strategy for influencing the quality of education is through school finance legislation. Should such legislation contain incentives which help shape the behavior of school districts? Should these incentives be applied universally across all districts or should they take into account situational differences? How can/should state policy makers consider the special characteristics of rural schools as they create incentives to change rural school district behavior?

Before one can answer these questions intelligently, one must first ask the questions of how one measures the needs of rural districts? Rural educators can often be heard to argue that our graduates do as well or better than non-rural graduates. They do as well on standardized tests, they continue their education at the same rate... And, there is at least some subjective evidence from non-rural types that this is true. A recent conversation with the vice president of one of the major industries in Decatur, Illinois, indicated that he would, whenever possible, hire individuals from rural communities over urban communities; they still bring with them a stronger work ethic. There is, however, insufficient hard data to really answer this question.

There is also the question of how does one measure the capacity of rural districts to support educational programs. "Rural wealth" is not

always easily equated with "urban wealth".

At present, we are forced to try to answer these questions in a vacuum. As stated earlier in this paper, we do not have a consistent data base across the country which will enable us to intelligently address these questions. Until we have such information, the debate can only proceed at the emotional, political level. It is likely to be a "zero sum" game. There will be winners and losers. Since politically, rural tend to be the minority, this will be a difficult game to win.

Steps must be taken to collect and analyze the needed information of the real needs of rural districts; the ability or lack of ability to financially support those needs; and then make sure that policy makers use this information to build an integrated case for the support of public education.

John Augenblick is a partner in Augenblick, Van de Wate, and Associates, a Denver based education consulting firm. Previously, he was the director of the Education Finance Center at the Education Commission of the States. He has worked with numerous states to help them analyze and modify their school finance formulas.

Paul Nachtigal, Senior Associate, with the Mid-continent Regional Educational Laboratory, Denver, Colorado, is responsible for the rural education programs. Previously, he conducted a national study of efforts to improve rural education, funded by NIE; and has served as a Project Specialist for the Ford Foundation.