# WHAT WE HAVE ALREADY TRIED IN STATE-LOCAL SUPPORT SYSTEMS

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I would suggest that there are two important reasons to consider seriously state support formulas for elementary and secondary education, although the topic can be tedious. First, in the words of the California Supreme Court, "education is a fundamental interest and affects so deeply the lives of the rising generation." Second is the large amount of money that is involved. Elementary and secondary education, not including higher education, is the second largest function in the public sector and in 1969 required expenditures of \$167 per capita. This can be compared with \$418 per capita for defense and foreign relations in general, but there is nothing between the \$418 and the \$167. The next major expenditure is \$78 per capita on highways.

If magnitude of resource commitment indicates significance of a service, then we must conclude that elementary and secondary education ranks high. It is at the same time a service whose cost rests mainly upon our fiscally weakest level of government. After the Federal government decides what it will provide the schools, and after state governments do likewise, it is then up to the localities to make an arrangement with the citizens and with the staff of the schools that all can live with. The proposals for full state funding would represent a sharp break with that practice. But mainly I want to talk about how some existing formulas are working today.

There are two main systems for state-local financing of schools in the United States — the foundation program plan, otherwise known as the "Strayer-Haig formula," and the percentage-equalizing plan, now sometimes called "district power equalizing." Both are based on the existence of taxing powers in the local school district, and in practice these local powers are chiefly exercised as levies on real

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property. The form of local taxes is basically irrelevant to the operation of the system of school finance, though admittedly some kinds of local taxes may be preferred to others. For example, local use of a supplement to state or Federal income taxes might be preferable to levies on real property.

The foundation program plan is in use in the states that so far have received Serrano type decisions — e.g., California, Minnesota, Texas, and New Jersey. There is probably no way that a foundation program plan, even in its more rigorous application, could meet the criterion that quality of education not be a function of local wealth. On the other hand, some persons, such as Professor John Coons of the School of Law, University of California, hold that district power equalizing, which is a rigorous revision of the kind of percentage-equalizing arrangements in use in Iowa, Massachusetts, New York, Pennsylvania, Rhode Island, and Vermont, could meet the criterion.

This paper discusses the ideas of these two alternate plans without reference to the details of arrangements in the New England States.

## The Foundation Program Plan and the Cole Act of New York State

This approach to state aid for education dates from the work of the Educational Finance Inquiry Commission (1921-24). The volume of the Commission's report for New York State was prepared by George D. Strayer and Robert M. Haig; it offered what Professor Paul Mort described as the "conceptual basis" of present day practice in equalization. With more or less important technical modifications, this fiscal device determines the allocation of school funds to local districts in the majority of states today.

In describing the practice of New York State in the early 1920's, Strayer and Haig stated:

A precise description of the basis upon which federal and state money is apportioned among the localities is an elaborate undertaking. The present arrangements are the product of a long history of piecemeal legislation. The result is chaos.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>See George D. Strayer and Robert M. Haig, Financing of Education in the State of New York, A Report Reviewed and Presented by the Educational Finance Inquiry Commission Under the Auspices of the American Council on Education, New York: The Macmillan Company, 1923. The statement of Professor Mort appears in Paul R. Mort, Walter C. Reusser, and John W. Polley, Public School Finance, New York: McGraw Hill Company, 3rd ed., 1960, p. 203.

<sup>&</sup>lt;sup>2</sup>G. D. Strayer and R. M. Haig, op. cit., p. 94.

The authors did provide, however, the following summary:

Almost all of the state aid is distributed primarily on a per-teacher quota basis which varies with the classification of the school district and, in the case of one of the quotas, with the assessed valuation in the district. Approximately one-half of the state aid is entirely unaffected by the richness of the local economic resources back of the teacher, and the portion which is so affected is allocated in a manner which favors both the very rich and the very poor localities at the expense of those which are moderately well off.<sup>3</sup>

In moving toward their recommendation for a new fiscal arrangement, Strayer and Haig first stated:

There exists today and has existed for many years a movement which has come to be known as the 'equalization of educational opportunity' or the 'equalization of school support.' These phrases are interpreted in various ways. In its most extreme form the interpretation is somewhat as follows: The state should insure equal educational facilities to every child within its borders at a uniform effort throughout the state in terms of the burden of taxation; the tax burden of education should throughout the state be uniform in relation to taxpaying ability, and the provision of the schools should be uniform in relation to the educable population desiring education.

This has a modern ring as far as the prescription about tax burden goes. However, it is no longer possible to believe that "equal educational facilities" represent "equalization of educational opportunity." It is now recognized that equality of purchased inputs does not, on the average, produce equality of education outputs as between the different groups of our society. Put another way, it is held today that the learning requirements of one student may be different from those of another, and that an educational program to allow the first to develop his abilities in high degree may be more or less expensive than a similar program for the second student.

Nevertheless, let us proceed with the development of the Strayer-Haig formula. The authors proposed, finally, the following state-local system of support:

To carry into effect the principle of 'equalization of educational opportunity' and 'equalization of school support'... it would be necessary (1) to establish schools or make other arrangements sufficient to furnish the children in every locality within the state with equal educational opportunities up to some prescribed minimum; (2) to raise the funds necessary for this purpose by local or state taxation adjusted in such manner as to bear upon the people in all localities at the same rate in relation to their taxpaying ability; and (3) to provide adequately either for the supervision and control of all the schools, or for their direct administration, by a state department of education.

Note that the authors have now replaced "equal educational facilities" by the notion of equality "up to some prescribed minimum." But note they suggest also that some schools may be directly administered by the state department of education. One of the drawbacks of educational practice in New York State, for example, is that a school which is obviously and grossly failing to meet the needs of its students is allowed to continue under the same local district management year after year. This particular suggestion of Strayer and Haig has not yet been taken much into account.

The proposal for the new system of state-local finance was next put into the following specific form.

The essentials are that there should be uniformity in the rates of school taxation levied to provide the satisfactory minimum offering and that there should be such a degree of state control over the expenditure of the proceeds of school taxes as may be necessary to insure that the satisfactory minimum offering shall be made at reasonable cost. Since costs vary from place to place in the state, and bear diverse relationships to the taxpaying abilities of the various districts, the achievement of uniformity would involve the following:

- (1) A local school tax in support of the satisfactory minimum offering would be levied in each district at a rate which would provide the necessary funds for that purpose in the richest district.
- (2) This richest district then might raise all of its school money by means of the local tax, assuming that a satisfactory tax, capable of being locally administered, could be devised.
- (3) Every other district could be permitted to levy a local tax at the same rate and apply the proceeds toward the cost of schools, but
- (4) since the rate is uniform, their tax would be sufficient to meet the costs only in the richest districts and the deficiencies would be made up by state subventions.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup>*Ibid.*, p. 162.

<sup>&</sup>lt;sup>4</sup>*Ibid.*, p. 173.

<sup>&</sup>lt;sup>5</sup>*Ibid.*, pp. 174-75.

<sup>6</sup> Ibid.

An example may help clarify the plan. Suppose it is determined (just how remains a problem to this day) that a "satisfactory minimum offering" costs \$1,200 per student per year. Suppose further that the richest district has an assessed valuation of \$40,000 per student. Then a levy of \$3.00 per hundred of assessed valuation will finance the school program in the richest district. All districts would be expected to tax themselves at the \$3.00-per-hundred rate or higher. Every district but the richest would receive some state aid. How much? Just enough to meet the deficiency between the yield of the \$3.00-per-hundred levy and the cost of the satisfactory minimum offering. A district with \$39,000 of assessed valuation per student would receive \$30 per student from the state. A district with only \$2,000 per student of assessed valuation would receive from the state \$1,140 for each of its students. All districts could provide the minimum offering, then, while paying a local tax at no higher rate than would be paid for a \$1,200 program in the richest district.

The Strayer-Haig proposal was translated into legislative form by Professor Paul Mort in a report to the Special Joint Committee on Taxation and Retrenchment (Davenport Committee) in 1925. The cost of the "foundation" or basic program was estimated at \$70 per student. The local contribution rate was set at 1.5 mills per dollar of the full value of property. It was further provided that no district should receive less state aid than it had formerly received. This proposal, the Cole Law, was adopted by the Legislature in 1925.

Mort's simple proposal was subject to much adjustment. The dollars-per-student measure of local district need was quickly changed into a dollars-per-teacher measure. The local contribution rate was revised periodically. Though Professor Mort had been against the state's offering financial incentives to local districts to spend money on schools, an incentive provision was built into the system so that districts did not receive the full amount of equalization money to which they were otherwise entitled unless they were spending not 1.5 mills of local tax levy for schools but 5 mills. Nonetheless, the main features of the plan were those sketched by Professors Strayer and Haig — and so they remain in the plan in use today.

Some Imperfections in Application of the Foundation Program Plan

In practice, the Strayer-Haig system of state-local finance has a number of drawbacks.

1. States which use the plan often leave their school districts in a

relatively unequalized condition. That is, some low-wealth districts find it necessary to levy a local tax at a high rate to produce low-expenditure per student programs, while at the same time rich districts are able to provide themselves with high-expenditure per student programs at low tax rates. Thus, the relation between quality of school program provided in different districts as measured by dollar expenditure per student and local tax effort is inverse, rather than direct. A body of legal experts across the country is now questioning whether such a condition — a condition, essentially, under which the state dispenses public education services according to the wealth of districts it itself has created — is constitutionally suspect under equal protection guarantees of state and Federal constitutions.<sup>7</sup>

It might appear strange that a fiscal device whose chief object is "equalization" fails so notably on an equity standard. There are at least three reasons why the result is obtained.

First, the dollar value of the minimum educational offering is commonly set so low that many districts, rich and poor alike, find it necessary to exceed it. Above the value of the minimum offering or foundation program, the inter-district differences in assessed valuation per student have their full effect. Suppose, for example, the value of the minimum offering is \$1,200 per student and two districts, call them A and B, each elect to spend \$1,600 per student. Let assessed valuation per student in A be \$20,000 and in B \$5,000. The extra tax rate effort to advance expenditures from \$1,200 to \$1,600 per student is \$2.00 per hundred in A and \$8.00 per hundred in B. Suppose B could advance its rate only by \$4.00 per hundred, taking account of local fiscal realities, not to mention possible legal constraints imposed by tax limitations. It would provide only one half the supplementary program of A, at twice the supplementary tax rate.

Second, the local contribution rate is seldom set at that rate which would pay for the foundation program in the richest district. Given the very unequal distribution of non-residential properties, the richest district (on an assessed valuation per student basis) is likely to be very rich indeed, and the mandatory local contribution rate would be very small. The result in a literal reading of the Strayer-Haig formula would be that the state government would be paying for

<sup>&</sup>lt;sup>7</sup>See Frank I. Michelman, "Foreword: On Protecting the Poor Through the Fourteenth Amendment," The Supreme Court, 1968 Term, *Harvard Law Review*, November, 1969, esp. pp. 33-59.

about all of education services. To avoid this result, a higher local contribution rate is chosen than that which would raise the value of the foundation program in the richest district.

Third, theoretically those rich districts which raise *more* than the value of the foundation program per student at the standard local contribution rate should turn that excess over to the state for redistribution to poorer districts. The contrary happens, in that such districts, no matter how wealthy they are, are given a "flat grant" per student. The result is anti-equalizing. If one should take the simple position that equity would prevail if the flat grant were abolished, then one must reckon with the fact that several major cities of the country, e.g., New York and San Francisco, are in effect flat grant districts. Hence, simple-minded reform runs in the face of common sense observation of the fiscal plight of large cities.

2. It continues to be difficult to recognize necessary differences in costs for different categories of students. The state aid program does little to encourage districts to meet the needs of non-English speaking students, for example. In the common practice of computing aid, high school students are weighted by a factor such as 1.25 and elementary students by 1.00. However, there is a growing feeling that the primary school years, not the secondary, are the points at which incremental resources should be concentrated. The "sparsity correction" is not really a correction for such extra costs as transport, but a reward for maintaining school districts of uneconomically small size. And so on.

3. The existence and widespread adoption of the so-called equalizing formulas appear to have encouraged state governments to abdicate to local districts their responsibility for the hard questions in education. Much is placed in the education code about which courses are to be taught in the various grades and about certification of teachers, but nothing definitive is said about the quality of the program to be laid before different categories of students. Such decisions are left to the local authorities on the ground that local people have had their fiscal resources "equalized," and hence are in a good position to use their knowledge of their students to develop the programs they need. Neither assertion is fully justified. Moreover, legislators' attention is distracted from specifying objectives of educational programs and concomitant resource requirements, toward scrutinizing proposed reforms of the equalization formula to see how many extra dollars might come to the home district.

As mentioned above, there is probably no way that a foundation program plan could meet the Serrano criterion that quality of edu-

cation not be a function of local wealth. Consider the rigorous version which holds that the state shall establish a sum of money which represents a proper level of expenditure per student per year. The state will determine the tax rate at which the richest local authority would just raise that sum of money per student. The state will arrange with all the authorities that it meet the gap between this recognized level of need and what is raised when local authorities apply the tax rate that would simply allow the richest district to break even.

Why is this not suitable under Serrano? It is implicit in the foundation program plan that the state does not demand all districts to accept its judgment of the proper amount of money to spend per student. Thus the state imposes a ceiling on state aid to local authorities, while not imposing a ceiling on local levels of expenditure. Clearly, rich districts can go beyond the ceiling using smaller increases in local tax rates than can poor districts. Hence one runs immediately into a violation of the Serrano criterion that local expenditures not be a function of local wealth. Because the traditional foundation program plan still used in the majority of states cannot meet Serrano standards except by being adapted into a full state funding program, we should consider what I called earlier percentage-equalizing grants. There are those who hold that a rigorous version of percentage-equalizing grants would meet the criterion of Serrano.

### Percentage-Equalizing Grants

These were established in England in 1917 and proposed for the state governments of our country by Harlan Updegraff in 1919. The idea is that the state government *shares* in the costs of a local program of education, with the costs themselves being locally determined and with the state's sharing ratio being higher in poor districts than rich. In its complete implementation, the grant assures that any two districts which levy the same local tax rate for schools have precisely the same dollars per student to spend, regardless of their local wealth. This is the basis upon which the arrangement is said to meet the criterion of *Serrano*. The local price of educational services is equalized regarding tax rate. For reasons that will become clear, nowhere has this grant system been fully implemented.

<sup>&</sup>lt;sup>8</sup>Harlan Updegraff, Application of State Funds to the Aid of Local Schools, Philadelphia: University of Pennsylvania Press, 1919.

Charles S. Benson

The operation of the grant can most easily be described as follows. Let state aid to a given district be determined by the formula:

$$A_{1} = \left[ 1 - \left( 0.5 - \frac{\text{assessed valuation per student in the district}}{\text{assessed valuation per student in the state}} \right) \right]$$
• Expenditures in the District

Suppose statewide assessed valuation per student is \$20,000. Let assessed valuation per student in school district 1, a relatively wealthy district, be \$30,000. In school district 2, a poor district, let the corresponding figure be \$10,000. Suppose further that both districts, the rich one and the poor one, wish to spend \$1,000 per student in their public school programs. Let enrollment in district 1 be 5,000 and in district 2, let it be 10,000. Obviously, total expenditure in district 1 is intended to be \$5,000,000 (5,000 students times \$1,000 per student) and total expenditure in district 2 is to be \$10,000,000. Let us compute state aid and local tax rates.

TABLE I
COMPARISON OF EXAMPLE DISTRICTS

	District 1	District 2	District 3	
Enrollment	5,000	10,000	5,000	
Assessed Valuation per Student	\$ 30,000	\$ 10,000	\$ 60,000	
Expenditure per Student	\$ 1,000	\$ 1,000	\$ 1,000	
Total Assessed Valuation	\$150,000,000	\$100,000,000	\$300,000,000	
Total Expenditures	\$ 5,000,000	\$ 10,000,000	\$ 5,000,000	
Total State Aid	\$ 1,250,000	\$ 7,500,000	\$ - 2,500,000	
Local Tax Rate	\$2.50 per \$100 of Assessed Valuation	\$2.50 per \$100 of Assessed Valuation	\$2.50 per \$100 of Assessed Valuation	

#### For District 1

$$A_{1} = \begin{bmatrix} 1 - \left(0.5 \cdot \frac{30,000}{20,000}\right) \end{bmatrix} \cdot \$5,000,000 = (1 - 0.75) \cdot \$5,000,000$$
$$= 0.25 \cdot \$5,000,000 = \$1,250,000$$

Local Expenditure in District 1 = Total Expenditure - State Aid = \$5,000,000 - \$1,250,000 = \$3,750,000

Tax Rate in District 1 = Local Expenditure/Tax Base = \$3,750,000/ \$150,000,000 = \$2.50 per \$100 of assessed valuation

#### For District 2

$$A_2 = \left[1 - \left(0.5 \cdot \frac{10,000}{20,000}\right)\right] \cdot \$10,000,000 = (1 - 0.25) \cdot \$10,000,000$$
$$= 0.75 \cdot \$10,000,000 = \$7,500,000$$

Local Expenditure in District 2 = Total Expenditure - State Aid = \$10,000,000 - \$7,500,000 = \$2,500,000

Tax Rate in District 2 = Local Expenditure/Tax Base = \$2,500,000/ \$100,000,000 = \$2.50 per \$100 of assessed valuation

The local tax rates in districts 1 and 2 are the same — \$2.50 per \$100 of assessed valuation, even though district 2 has only one-third the wealth per student of district 1 and even though district 2, the poor district, is twice as large as district 1, the rich district. Under a fully operational percentage-equalizing grant the rule holds: any set of districts that chooses the same expenditure level per student will obtain that expenditure at equal local tax rates, regardless of the wealth of the districts.

This kind of relation between the state and local authorities, a relation under which, in effect, the "price" of educational services stands in a precise one-to-one status with expenditures, has been hailed as an achievement in equity. Surely such a system would be preferable to one under which poor districts must submit to high tax rates to finance meager programs while rich districts provide themselves with lavish school programs at low tax rates. However, it is extremely difficult to put a percentage-equalizing grant fully into operation. Here are two reasons.

First, differences in assessed valuation per student vary in much wider range than shown in our previous example, where district 1 has

Charles S. Benson

99

three times the wealth per student of district 2. It is not uncommon to find that the differences run as high as ten to one. So suppose we add to our previous example a district 3, having 5,000 students, an expenditure of \$1,000 per student, and an assessed valuation per student of \$60,000. The formula would read:

For District 3

$$A_3 = \left[1 - \left(0.5 \cdot \frac{60,000}{20,000}\right)\right] \cdot \$5,000,000$$

$$= (1 - 1.5) \cdot \$5,000,000$$

$$= -0.5 \cdot \$5,000,000 = -\$2,500,000$$

Local Expenditure in District 3 = Total Expenditure - State Aid = \$5,000,000 - (-\$2,500,000) = \$5,000,000 + \$2,500,000 = \$7,500,000 Tax Rate in District 3 =

\$7,500,000/\$300,000,000 = \$2.50 per \$100 of assessed valuation

The formula produces a negative aid ratio of -0.5. This means that district 3 must be expected to pay for its school program in full and make a contribution of \$2,500,000 from its own local taxes to the other districts of the state! State governments are not generally inclined to demand such self-sacrifice of rich areas. Instead they provide a minimum school aid grant to districts, even the very richest. In New York the minimum grant per student in 1971-72 is \$310 per student in weighted average daily attendance.

<sup>9</sup>If the coefficients of 0.5 in the state aid formula were reduced to 0.1, then the negative grant implied in the original formula would disappear, i.e.,

$$A_{3} = \left[ 1 \cdot \left( 0.1 \cdot \frac{60,000}{20,000} \right) \right] \cdot \$5,000,000$$
$$= (1 \cdot 0.3) \cdot \$5,000,000$$

 $= 0.7 \cdot \$5,000,000 = \$3,500,000$ 

District 3 now receives state aid for schools in the amount of \$3,500,000, instead of (theoretically) being charged \$2,500,000. However, as the coefficient is reduced from 0.5 toward 0.1, the state share of total educational spending rises, for the state share is given by (1 - 0.5) = 0.5 or (1 - 0.1) = 0.9, or, in general, by (1 - x). This last example, where x = 0.1, implies 90 percent state support — in effect, full state assumption of costs. Thus, the only way the percentage-equalizing grant can accommodate extreme ranges in local assessed valuations per student is by establishing state assumption of educational costs.

Second, for the percentage-equalizing grant to be fully operational in the sense of matching up tax rates and expenditures, it is implied that one of two conditions must hold: either the state places a ceiling on educational expenditures per student that applies to all districts, or the state shares in educational expenditures with districts at whatever level of spending the local districts choose. The first option is called "district power equalizing." I would like to point out that the version of district power equalizing that Professor Coons is advocating implies a ceiling on expenditures in the districts.

Some people would wish to preserve the kind of local freedom to spend we have now. That is another version: the fully equalizing percentage grant without a ceiling. Consider this second option — namely, that the state share in locally-chosen expenditure levels without limit. This is seen by some state officials as giving local districts a "blank check." It is a troublesome problem, moreover, because aid ratios can rise to 90 percent and above, meaning that poor local authorities can buy expensive educational programs with 10 cents per dollar or less of local money. Only in Wisconsin and Utah — and only under the constraint of rigid audit procedures — has there been serious experimentation with major open-ended grant programs.

The course commonly chosen by states that have used the percentage-equalizing grant is to provide for state sharing of locally-determined expenditures up to a point (\$860 per student in weighted average daily attendance in New York) but not beyond that point, while at the same time allowing districts to exceed the state-sharing maximum if they wish. The result of this compromise is to make the percentage-equalizing grant into a foundation program plan for all practical purposes, especially when, as in the case of New York, most districts actually do spend beyond the point at which the state stops its contribution. In effect, the \$860 upper limit of sharing in New York State is the cost of the foundation program per student.

Using our simple examples of the three districts, let us see the effect on local tax rates of the combination of a minimum grant of \$300 per student and a ceiling on state sharing of \$1,000 per student. Assume all figures as before, except that a minimum grant of \$300 per student is provided and except that all three districts now decide to spend not \$1,000 per student but \$1,200 (the state ceiling for sharing, as noted, is assumed to be \$1,000).

<sup>&</sup>lt;sup>10</sup>John E. Coons, William H. Clune, III, and Stephen D. Sugarman, *Private Wealth and Public Education*, Cambridge: Harvard University Press, 1970.

TABLE II

# COMPARISON OF EXAMPLE DISTRICTS WITH MINIMUM GRANT AND STATE AID CEILING PROVISIONS

	District 1			District 2		District 3	
Enrollment		5,000		10,000		5,000	
Assessed Valuation							
per Student	\$	30,000	\$	10,000	\$	60,000	
Expenditure per							
Student	\$	1,200	\$	1,200	\$	1,200	
Ceiling on State							
Sharing	\$	1,000	\$	1,000	\$	1,000	
Minimum State Grant							
per Student	\$	300	\$	300	\$	300	
Total Assessed							
Valuation	\$150,000,000		\$10	\$100,000,000		\$300,000,000	
Total Expenditures	\$	6,000,000	\$ 1	12,000,000	\$	6,000,000	
Total State Aid	\$	1,500,000	\$	7,500,000	\$	1,500,000	
Local Tax Rate		00 per \$100		0 per \$100		per \$100	
	of Ass	essed Valuation	of Asse	essed Valuation	of Assess	ed Valuatio	

#### For District 1

$$A_{1} = \left[1 - \left(0.5 \cdot \frac{30,000}{20,000}\right)\right] \cdot \$5,000,000$$
$$= 0.25 \cdot \$5,000,000 = \$1,250,000$$

This computation reflects the fact that only \$1,000 per student is recognized for state sharing; however, the computed amount of aid, \$1,250,000, falls short of the district's minimum aid of \$300 (5,000 students  $\cdot$  \$300 = \$1,500,000). So A<sub>1</sub> = \$1,500,000 NOT \$1,250,000 as the formula suggests.

Local Expenditure in District 1 = \$6,000,000 - \$1,500,000 = \$4,500,000

This computation reflects the fact that the district is now spending  $$1,200 \text{ per student} ($1,200 \cdot 5,000 \text{ students} = $6,000,000)$ . Tax rate in District 1 = \$4,500,000/\$150,000,000 = \$3.00 per \$100 of assessed valuation.

#### For District 2

$$A_2 = \left[ 1 - \left( 0.5 \cdot \frac{10,000}{20,000} \right) \right] \cdot \$10,000,000$$

 $= 0.75 \cdot \$10,000,000 = \$7,500,000$ 

Aid remains the same as in the previous example.

Local Expenditure in District 2 =

\$12,000,000 - \$7,500,000 = \$4,500,000

Tax Rate in District 2 =

\$4,500,000/\$100,000,000 = \$4.50 per \$100 of assessed valuation

To provide the same quality program, District 2 must now sustain a tax rate 50 percent higher than in District 1.

For District 3

$$A_3 = \left[1 - \left(0.5 \cdot \frac{60,000}{20,000}\right)\right] \cdot \$5,000,000$$
  
= -0.5 \cdot \\$5,000,000 = -\\$2,500,000

However, the minimum grant comes into play and District 3 receives a sum determined as 5,000 students times \$300.  $A_3 = \$1,500,000, NOT - \$2,500,000$  as the formula suggests.

Local Expenditure in District 3 = \$6,000,000 - \$1,500,000 = \$4,500,000

Tax Rate in District 3 = \$4,500,000/\$300,000,000 = \$1.50 per \$100 of assessed valuation

Note that the three districts which have equal expenditures per student now have unequal tax rates, and the richer the district, the lower the rate. The percentage-equalizing plan is no longer meeting Serrano-type standards. This is precisely what has gone wrong with the state equalizing plans in use today, which provide a minimum grant per student. States have also put ceilings on the expenditures per student that the state will recognize for reimbursement or sharing. As districts move above the ceiling, clearly these extra or marginal expenditures are going to fall much more heavily on a low wealth district than on a high wealth district.

Charles S. Benson

Suppose, finally, that District 3 chose to spend \$2,000 per student. Its budget would rise to \$10,000,000. Its state aid would hold constant at \$1,500,000, and its tax rate would be \$8,500,000/\$300,000,000 = \$2.83 per \$100 of assessed valuation. Rich District 3 thus would spend \$800 more per student than the poor District 2, but its tax rate would be \$1.67 per \$100 lower! This demonstrates the inverse relationship between expenditures and tax rates that is characteristic of most state aid systems in the United States. And that is the situation that the courts have been complaining about.

The formula now in use in New York State for distributing \$1,672 million (70 percent of total state assistance for public elementary and secondary education) is of the form just described. Specifically, aid to a given district is

$$A_1 = \begin{bmatrix} 1 - \begin{pmatrix} 0.51 & \cdot & \frac{\text{district valuation per student}}{\text{state average valuation per student}} \end{pmatrix} \end{bmatrix} \cdot E$$

where E = approved operating expenses, subject to an upper limit of \$860 per student and subject further to a minimum grant of \$310 per student. It has been suggested that one of the problems of the state-local financial relationship is that state governments have been miserly. Now it is hard to condemn New York State for being miserly. New York State distributes roughly 49 percent of public elementary and secondary education expenditures in the state in the form of state aid, and this is about \$2.5 billion per year. Given a percentage-equalizing grant and such substantial state contributions, what are the results? Take a geographically bounded area, namely Long Island, because otherwise local fiscal responsibilities and costs can vary too much. Long Island is small and has a dense population. It has some 600,000 public school students. Between places that are almost cheek by jowl, expenditures per student per year vary by a thousand dollars. You have the inverse tax rate situation which was criticized in Serrano.

One can go beyond this to categorize grants on the basis of distribution. That is, if following the equity notion in percentage-equalizing grants, there should be a clear relationship between local tax rates and percentage expenditure per student, then if one district is 10 percent above the regional average in tax rate it should have money to spend equal to 10 percent above the state average expenditure per student. I mean a 1:1 relation. Districts on Long Island can be classified on the basis of this relationship and put in the categories of winners and losers. The winners have expenditures per

student higher than their local tax rates would justify, and losers obviously have less money to spend than their tax rates would justify. It turns out that the largest districts on Long Island, namely Levittown and Hicksville, are losers and the middle to small rich districts are winners. Furthermore, some 70 percent of the public school students on Long Island attend schools in districts that are losers. This has political implications in terms of some new alignments in support of full state funding, under which that state can limit the amount spent per student.

My conclusion from this is that it would be difficult to solve the problems of educational finance in New England simply by laying more money on the kind of percentage-equalizing grants that you have been using. New York uses that same kind of percentageequalizing grant and it places, relatively speaking, much more money on it than you have been doing in New England. And yet, the results in New York State are such that if the people who make up the Supreme Court of California had happened to be in New York, they would have found the same data to make their case. The point is, percentage equalizing in the currently politically acceptable form that is, with a ceiling on expenditures so as not to give districts a blank check and a minimum grant so as to provide everybody with something - leads to a situation which is almost guaranteed to give this inverse relation between the tax rates in the districts and the levels of their wealth: high tax rates in poor districts and relatively low tax rates in rich districts.

Imagine that a state government set out to meet three objectives in its education finance policy: (1) equity, as measured by a plan that would give districts equal spending power per student at equal tax rates, a kind of interpretation of this Serrano rule; (2) local choice without limit in the amount of educational spending districts wished to undertake, which prevails most often today as far as the states are concerned; and (3) protection of the state budget (i.e., avoidance of giving away "blank checks"). Reflection will indicate that the three objectives are incompatible, though any two are attainable. One can have equity through a fully operational percentage-equalizing grant, and full local choice over level of spending, but the state budget will be unprotected. One can have a protected state budget and local freedom to spend, but equity will be sacrificed for the reason that expenditures in excess of the state maximum grant will fall with much greater severity on the tax rates of poor districts than of rich. One can have a protected state budget and equity, but local freedom to raise expenditures beyond a state-imposed limit is sacrificed.

If the choice is the last of the three, then one must decide finally between the constrained version of the percentage-equalizing grant (district power equalizing) or full state funding. The writer feels this final choice is one that should hang on the question of which plan deals most favorably with large cities. The answer to that question, of course, is the subject of another paper, as is also the question of whether tastes of adults for particular public services should determine differential opportunities for development of members of the rising generation who live in the different towns of a given state.

It might also be possible to have a reasonably equitable percentage-equalizing grant and considerable local discretion to spend if one could reduce the range of wealth among the districts of the state — that is, the wealth per student. One way to do this might be to shift the basis of local support for education from property values to a surtax on Federal or state income tax returns. This would get one away from the problem of the concentrations of industrial and commercial properties and profits — which is quite distinct from the concentrations of students. The use of a surtax on Federal income tax returns is something to begin to think about. It may be a quick loser, but there should be exploration.