EQUITY AS A GOAL OF ELEMENTARY AND SECONDARY SCHOOL FINANCE IN THE UNITED STATES: A PROBLEM FOR COMMONWEALTH COUNTRIES?

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I. Introduction

This rather long essay was planned well over a year ago. It would be pleasant if we could blame our procrastination upon the condition of one's health, the press of other business, the weather, etc. While all of those factors may well have delayed this piece of writing, honesty compels us to admit that our hesitation springs from more substantial roots. First, we have observed that most of the publications of the Commonwealth Council on Educational Administration eschew "political" studies or "public policy" studies. This is understandable in that training programs for educational administrators have only recently been established in many countries of the Commonwealth, and the desire seems to be to establish the credentials of those programs in "professional" terms, rather than to become mired in the controversy of "political" studies. That was also true in the United States until fairly recently. However, there is hardly a program now for the training of school administrators in the United States that does not include political studies in some form. The curricular approach varies. Students can find themselves in courses and seminars on the "politics of education," or the political content may come through courses labeled "public policy," or the political aspects may be found in "social foundations" courses that are sometimes a part of administrator training programs. It might also be noted that the American Educational Research Association has a very active interest group on the "politics of education" and indeed there is a separate "Politics of Education Association" in the U. S. Perhaps even more revealing is the comparison of the newer school finance textbooks such as that by Garms, Guthrie, and Pierce, with older school finance textbooks.(1) The newer school finance textbooks have far more political content. Nevertheless, should this small effort be found worthy of publication there will doubtless be those "professionals" in the Commonwealth who may find it jarring on their nerves. There is no way, however, that we have found to approach the concept of "equity" in school finance without also being involved in basic political values.

Our second reservation springs from the knowledge that school finance funding systems differ greatly throughout the world and the highly decentralized system of funding for elementary and secondary education in the United States may well be an extreme case from which it is difficult to generalize to other countries. However, students from countries other than the United States have taken our school finance courses here at Illinois State University and they tell us repeatedly that the "equity" problems we discuss are present in India, Nigeria, the Philippines, and many other countries. To be sure, the form of the "equity" problem does differ radically from country to country, but at the higher levels of generalization the problem seems to be omnipresent and worldwide.

Our third reservation springs from the difficulty of writing a paper for an audience that knows very little of the details of school finance in the United States. It is always easier to write for an audience in one's own country where one can assume familiarity with the basic institutional forms. A paper such as this runs the risk of being overly long if very little can be assumed on the part of the reader.

Given these reservations, why try? We try because we think it would be useful at this stage in the development of administrative programs in the Commonwealth of Nations to be reminded of basic political values from which all institutional arrangements for financing public schools are derived. "Professionalism," in our view then, does not mean avoiding political values, rather, it means trying to be forthright and candid about those values. More specifically, it means setting forth clearly the philosophical and political values upon which much empirical-quantitative research rests. Very little empirical research in educational administration, or at least in educational finance, in our view, is "value free," rather it is "value based." Second, a great deal of empirical-quantitative work has been done in American universities on the notion of "equity" in school finance. While this paper will not attempt to spell out all the statistical and quantitative procedures for operationalizing the notion of "equity," the footnotes will provide those interested in measuring the concept of "equity" with a place to start. Empirical research in the United States has devised ways of measuring certain fiscal policy equity goals and it would be irresponsible not to try to share those techniques with other researchers in the world who are interested in the same public policy problems. However, it seems necessary to present this broader, more conceptual paper, before proceding to specific statistical techniques for measuring the concept of "equity."

Third, while the American reader has been provided with excellent treatments of the nature of the equity reforms in the 50 states, there is no easily available treatment of equity or equity reforms for those not so familiar with American institutions. The publications of the Education Finance Center for the Education Commission of the States keep American readers very well informed on aspects of the equity topic and on equity reforms.(2) What we have attempted here is to cover some of the same ground on the equity problems as the ECS publications, but at a level of generalization applicable to countries other than the United States, and to do this in much briefer form than the ECS series of publications on the same subject.

Let us note at the outset that the fundamental political and social value here is equalization of educational opportunity. If the reader comes from a country whose traditions, whose government or whose people do not allow belief in that basic value, then there is little reason to read beyond this point. We know, of course, that countries do vary in their attachment to this value. Recently Stephen Lawton has argued that the single fundamental value of equal educational opportunity shapes much of the school finance institutional structure not only of the United States but also of Canada.(3) Earlier, in the Journal of Educational Administration, the senior author of this paper also attempted to articulate the fundamental political values which act as the foundation for school finance in the United States.(4) It is important to realize that equalization of educational opportunity is not espoused in the United States for its own sake. Rather, it is believed that equalization of educational opportunity will lead to the formation of a large, well-educated middle class, and, in turn, that the presence of this large middle class will provide stability to the body politic. This is hardly a novel idea; it has been with us since Aristotle's Politics.(5) It is also believed that equalizing educational opportunity will provide greater social mobility, that is that talent and human resources trapped in the less affluent social strata of a country will be released for leadership positions in that society by equalizing educational opportunity. Again, hardly a novel idea. For example, the importance of such a "creative minority," drawn from all social ranks, for any civilization, was spelled out in considerable detail by the British historian, Arnold Toynbee.(6) The case then for equalizing educational opportunity rests partially upon insuring the survival and the progress of any country, no matter what that country's political heritage might be.

One must admit, however, that Lawton is probably right in stressing the fundamentally English origin of the notion of equalizing educational opportunity. As he indicates, it would be difficult to conceive of a tradition of equal educational opportunity without the support of the broader "liberal tradition in America" as outlined so well by Harvard's Louis Hartz.(7) But it would also be even harder to conceive of any such tradition in America without the Magna Carta, John Locke, and the "rights of Englishmen" as so painfully hammered out through centuries of conflict between Parliament and Crown.(8) Commonwealth countries then have at least two very good reasons for placing equalization of educational opportunity at the base of their institutional structure for school finance, and also for making sure that their newly trained administrators understand this fact. Like all countries they wish to survive and prosper in competition with other countries, and expanding educational opportunities should help them to do that. Second, they have inherited the same mantle of 18th and 19th century liberalism as did the United States and Canada. Countless authors in the United States and Canada have argued that the right to an education is basic to all other political and constitutional rights. The arguments can be found from the philosophical works of John Dewey to the legal briefs of San Antonio Independent School District vs. Rodriquez. Assuming for the moment then that we can get some agreement that equalization of educational opportunity is an important component of democratic political theory, and that "equity" is grounded in this fundamental value, can more specificity be provided to the notion of "equity"?

II. Three Aspects of the Equity Problem in School Finance

"Equity" in its most general sense refers to fairness in the distribution of funds for education. But one person's notion of "fairness" is not another person's, and this very general "fairness" conceptualization will not take us very far. We can ask, "Equity for whom?--the child?--the taxpayer?" Fiscal equity, however, can also be thought of as the "equal treatment of equals." This construction springs from a notion that every person is equal before the law. That tradition can be developed on a case by case basis, as in the English Common Law. In the United States, however, it derives additional strength from written constitutions both at the federal level and at the individual state government level. The "equal protection" clause of the 14th amendment of the U.S. federal constitution has been the source of a large number of constitutional challenges to state government school finance systems.(9) Perhaps more importantly, each of the 50 state constitutions in the United States also has an "equal protection" clause which a plaintiff can resort to if he or she feels that the state's school finance system has not provided "equal treatment of equals." Perhaps one reason why "equity" is so important to American school finance is the fact that a citizen of the United States can challenge the constitutionality of any state's school finance system when he or she feels that the state's educational fiscal system has violated a basic constitutional right. In short, under the American system of separation of powers, an individual's perception of what constitutes "equity" in school finance can be sought in the courts as well as in the state and federal legislatures.

There are at least two major ways in which the norm of "equal treatment of equals" can be violated. First, there is the social class component. Since the children of a poor family are thought to have the same civil and constitutional rights as the children of wealthy families, when the quality of education is markedly superior for the children of the wealthy to the quality of education for the children of the poor, a violation of the goal or norm occurs. If the difference in the quality of education between the rich and the poor is primarily a matter of private sector supply, that is, primarily a matter of the rich using private schools to provide better educational services, then, while the matter may still be important from a broad public policy point of view, no constitutional problem may arise. (However, there are certain philosophical considerations here concerning equal treatment versus individuals' rights to purchase the best possible education for their children. The debates in England surrounding the Labour government's attempt to abolish the private sector give an indication of this. In the U.S.A. the debate is about the voucher system.) However, when difference in quality of educational services is not primarily a matter of private sector supply, but rather it is a function of the way in which the public educational services are provided, then a constitutional question can and does emerge.

Social class violations of the "equal treatment of equals" norm tend first to be fought out in terms of "access" to education rather than in terms of the quality of educational services, since the poor have often been denied educational services entirely. The liberal tradition in most of the democracies of the world argues that these social class differences in "access" to education, and even to different quality levels of educational services, can be overcome by making more education and better education available to the poorer classes. To be sure, that argument is challenged by our Marxist colleagues who believe that the public schools of many western democracies either can or will do nothing more than mirror the social class differences in the larger society. From the Marxist point of view, the public schools merely teach the children of the poor to take a subordinate place in society; they legitimize an unfair social reward structure and merely reproduce the class system. They do not, as the liberals believe, teach the children of the poor that they can aspire to leadership positions in the country.(10) The argument is also challenged by discouraged and disillusioned liberals who feel that the public schools are too weak an institutional mechanism by which to overcome the social class differences in the greater society. Jules Henry suggested that "all cultures must introduce some intellectual sabotage into education." No society can tolerate too much stupidity, nor too much enlightenment. The latter represents a challenge to traditional ways. Henry described "the historic necessity for stupidity, "...and the need for all educational systems (to) train people to be unintelligent within the limits of the culture's ability to survive."(11)

It is interesting that both the conservatives, at least of the far right, and the Marxists on the left, hold that the public school should play little or no role in reforming society.

By contrast the liberal tradition has placed at least a part of the responsibility for reforming and changing society on the shoulders of the public schools. This social class component of the equity problem may well be the most difficult and explosive aspect of the equity problem in school finance. We feel, however, that debate and research in the United States has no special light to cast on this problem. In fact, American educators have shown a tendency to sweep social class problems under the rug, or at least not make them the central focus of public policy debate. Debate and research in Great Britain may well be more revealing on social class aspects of the equity problem.(12) Debate and research in the United States can cast, however, some light upon a related violation of the norm of "equal treatment of equal" that should interest Commonwealth readers.

This second violation occurs when a federal form of government is found in a country and the lower level of government raises some or all of the funds to support education, particularly elementary and secondary education. If wealth is evenly distributed in the country in question there will be no great problem since each lower government unit can afford roughly the same level of edcuational services. At least the differences in levels of educational provision may be due more to differences in preferences for education over other public services than they are to differences in wealth. However, when the lower forms of govenment are not equal in wealth, and particularly when there are many of these subordinate governments, and they are geographically small, then a serious problem can arise.(13) We believe this federalist structure does prevail in many parts of the world and here research and debate in the U. S. may be of some help. From the turn of the 19th century in the United States, it became obvious that the local school districts were not going to be able to offer equal educational opportunity or equal levels of educational service without considerable help from the next higher level of goverment, that is, the 50 state governments. Indeed, many state constitutions made education specifically a responsibility of the state government. The U. S. federal constitution is notably silent on the matter of education. Federal involvement in education is usually justified constitutionally through the "general welfare" clause since there is no education clause or article in the federal constitition.

Disparities in expenditure per pupil of at least three to one, that is, the wealthier local public school district spending three times what the poorer district spends, have been fairly common within most of the 50 U. S. states. There are those who believe that this range has been reduced in recent years and we shall return to this important point in the latter part of this paper. The major source of this variation in expenditures is the variation in property valuations between local school districts in the United States. Local educational funds are raised in the United States primarily by taxation of real estate valuations and the range of property valuations between school districts within an American state may run up to eight or nine to one. This wide variation in property valuations is caused by variations among U. S. school districts in commercial and industrial valuations as well as by residential valuations. There are considerable differences in the property compositions of local school districts. Some districts are primarily farm communities with considerable farm valuations but little industry, some have concentrations of industry and shopping centers within their boundries, etc., etc. This diversity adds to their funding problems.

Several conceptual problems occur when focusing only upon expenditure per pupil differences between U.S. school districts. The first problem occurs in assuming that dollars per pupil translate easily into quality levels of educational services. At the extremes there seems little doubt that a district spending two or three times as much on public education as another district provides a better level of educational services. However, when the difference is only a few hundred dollars, it is not so clear that the higher spending district is indeed providing a higher level of educational service. There is also the problem that some of the difference in spending may be quite "legitimate." There are geographical cost-of-education differences between states, and within states, and the same level of expenditure may not buy the same level of educational services everywhere in the country. Also some districts have greater educational "need" than other districts and therefore should spend more on education irrespective of their wealth, or their consumer preferences for education. By and large, though, the evidence is clear that the federal form of government and the decentralized nature of American education have generated expenditure per pupil variances that are difficult to reconcile with the egalitarian traditions of American political culture and with the equal protection guarantees of both the federal and the state constitutions.

The federal form of government and the tradition of raising large amounts of funds for public education at the local level bring about other kinds of violations of the norm of "equal treatment of equals." Empirical evidence clearly shows that local wealth, especially local wealth in the form of property valuations, is the prime determinant of the level of educational spending among U. S. school districts.(14) Thus, a child may have equal constitutional rights in the United States, but it is the residential location of the child's parents that determines the level of educational services that will be provided to that child. Put another way, expenditure levels of local school districts in the United States are not "wealth neutral." For a country as devoted as the U. S. is supposed to be to the market economy and the private enterprise system, one might think that "wealth neutrality" would not be a proper goal, or at least not a popular goal, for U. S. school finance policy. However, since citizens are presumed to be equal, there has never been a strong rationale for having public services in the U. S. conform to the dictates of a market economy in which not only consumer preferences, but also differences in consumer wealth, determine the level of public services purchased. This is but one of many philosophical paradoxes in the U. S. A.

Thus the federal form of government and the tradition of raising large amounts of funds at the local level in the U. S. cause an equity violation from the point of view of the child located in the property valuation poor district. An equity violation also occurs from the point of view of the taxpayer in the property-poor district. That taxpayer will have to pay a much higher tax rate in order to raise the same amount of dollars as are spent in the wealthier district. It is not uncommon to find that rate payers in poor American school districts must pay twice the tax rate and receive only half of the level of educational services as rate-payers in wealthier U. S. districts. Thus there is a taxpayer equity violation as well as a student equity violation caused by this federal system of government and the related tradition of raising funds for education at the local level.

The third aspect of the equity problem in the United States springs from a quite different conceptualization of equity as the "unequal treatment of unequals." Under that formulation of the equity problem it is not enough for the U. S. federal and state governments to treat all children alike. The argument runs that children with handicaps, either physical, emotional, or social, cannot enjoy the benefits of equal citizenship without having more funds spent on them than "normal" children. This has led to a large number of so-called "categorical" grants by American states for physically and emotionally handicapped children and also to federal aid for thse handicapped children. The parent of a handicapped child can also seek relief in both the U. S. and state constitutions if he or she feels that that child is not receiving an educational service level adequate to address the special needs of the child. The "unequal treatment of unequals" notion also extends to programs for children from low income families and the children of racial and ethnic minorities in the United States. What is by far the largest and most expensive single federal educational program in the United States, that is, Title I of the Elementary and Secondary Education Act, as amended, plus no less than 24 different "compensatory" education programs in 24 American states, attempt to address the special needs of children from low income and minority families. These state programs differ markedly varying from small programs of one or two million dollars to large programs of several hundred million dollars. A major logical inconsistency can be seen between the two notions of equity. "Equal treatment of equals" assumes nearly equal expenditure levels between students, but "unequal treatment of unequals" assumes that at least some expenditure per pupil differences are "legitimate," given the special educational needs of the pupils. This contradiction remains unresolved in both American school finance literature and in American school finance litigation.

We would not want the reader to assume that equity considerations are always at the forefront of debate and research in American school finance. To the contrary, interest in equity problems waxes and wanes with the passage of time. Interest in equalization of educational opportunity seems to have been more pronounced in some periods of American history than in others. In the period immediately following the Civil War, interest ran high in extending educational "access" to all American youth. The matter again emerged with World War I, when test scores revealed major educational shortcomings of young men from poor families and rural families. The great depression of the 1930's produced a similar concern with equalization of educational opportunity. The whole push for equity can be seen as part of the movement of the rights of different groups. In the U.S.A. in the last 25 years this has included various minorities through Civil Rights, women, the handicapped, the gifted, etc.

Equity considerations moved into the center stage with the Kennedy-Johnson administrations and the "war on poverty." The period between 1965 and 1975 was marked by a great many court challenges to state grant-in-aid systems and by an unusually high level of state legislative activity to correct equity problems.

There are those who believe that concern with equity is a hallmark of the "old liberalism" and that an increasing conservatism on the part of the American government and the electorate signals a turn away from interest in equity problems in the 1980's. Perhaps, but there have always been outspoken academics, like R. L. Johns, who all through the decades have never let the American electorate forget that the fiscal system should accomplish equalization of educational opportunity.(15) The egalitarian impulse runs so deep in American political thought as in American legal institutions even if there were no outspoken university professors, (16) the problems of equity in the educational fiscal structure would periodically emerge. Since these problems have been a part of American education for decades, if not centuries, it is not surprising that various solutions have been proposed and to that matter we now turn.

III. Proposed Solutions to the Equity Problem

Since much of the equity problem in the United States stems from the practice of raising funds for elementary and secondary education at the local level, it would appear that the most straightforward way to solve the school finance equity problem in the United States would be to abandon this fiscal practice. Such a solution was proposed at the end of the 1930's by the late Herbert Morrison of the University of Chicago.(17) In more recent years, this solution has also been endorsed by a presidential advisory commission on school finance operating during the Nixon administration.(18) Governors of several states including Michigan and Rhode Island have also proposed "full state assumption," as it is called, but no state legislature in the United States has passed such a reform. It should be noted that one state, Hawaii, does raise virtually all its funds for elementary and secondary education at the state level. Four other states raise more than 75% of their funds for elementary and secondary education at the state level: Alaska, Kentucky, New Mexico, and Alabama. However, by contrast, Nebraska and South Dakota raise only 18% of their funds for elementary and secondary education at the state level and the state of New Hampshire remains the most traditional in the country, raising almost all of its funds at the local level, the state contributing only 5%.(19) The state at the median in 1978-79 raised 53% of its funds at the state level and this median "state share" has been moving slowly upward in the United States for many years.

Therefore, while it might not be inaccurate to describe the United States as slowly moving toward this solution of the equity problem, that is, "creeping full state assumption," there is a distinct hesitancy to endorse this solution for a number of reasons. First, the solution, while elegant in its logical simplicity, runs counter to another political value deeply engrained in the American political heritage. The value of de-centralized government, close to the people, has been espoused since the founding of the American republic. In fact, in 1935, that most astute of political observers, Count Alexi Charles Henri Clerel de Tocqueville, believed that the formation of "lesser associations" and the desire to decentralize authority would prevent democracy in America from degenerating into rule by the illiterate mob. Few scholars have been able to improve on de Tocqueville's description of the United States as being forever caught between the fear of centralized power on the one hand, and the desire to use that centralized power for egalitarian purposes on the other hand.(20) In like manner, H. Thomas James described American school finance as forever caught between "egalitarianism" and "libertarianism."(21) And indeed we do seem to swing back and forth between these great principles like the pendulum of some gigantic social clock ticking relentlessly onward down the passage of time.

A principal tenet of "libertarianism" in American school finance is the notion of "local control of education." This is such a "sacred cow" that it is very difficult to sort out how much of the benefits of local control in the United States are real, and how much are mythical.(22) With certain kinds of individuals--local school boards and their state school board associations, conservative politicians, some (though not all) university professors, etc.--"local control" is more an article of faith than it is a testable hypothesis. Those less emotionally attached to this political value are willing to admit that some kind of local control of education might still prevail under conditions in which the state, not the locality, provided most of the funds for education. And indeed, public education does not seem to have suffered all that much in Hawaii and Alaska which fund overwhelmingly from from the state level. Much would depend upon the kinds of grants-in-aid from the central government to the subordinate units of government. If these grants carried many rules and regulations, "strings" in the American vernacular, then local control would doubtless suffer. However, if the grants were given by the central government to the subordinate government with few restriction, what some call "bloc" grants, then local control might not suffer much at all. It must be admitted that the American grant-in-aid tradition is one with considerable "strings," that is, the desire of the superior government to dictate what the subordinate government will do with the money, and thus the adversaries of full state assumption would lessen local control of education.

There are some other reasons why full state assumption has not become the "treatment of choice" for the equity problem in American school finance. There is a certain amount of hypocrisy in the egalitarianism of some professional educators. Both administrators and teachers have used a kind of "demonstration effect" to lever up expenditures per pupil between school districts. The technique consists of deliberately letting some of the more affluent districts set high expenditure levels and then embarrassing one's own school board into providing a similar level of educational services for one's own children and the children of one's neighbors. Local administrators have used this technique of pointing to "lighthouse" school districts for decades in the United States. As collective bargaining came upon the scene, teacher organizations used a similar technique. By waiting until wealthy districts settled their labor agreements first, a "target" was established for one's own salary schedule. Most believe this ability to play one local school district against another local school district has been effective in moving up the whole support level for education in the U. S. Should the state assume total funding of education, the "whipsaw" phenomenon would be gone. Only state-to-state comparisons would be possible.

Full state assumption would certainly change the scope and nature of collective bargaining in the United States. If the state and not the locality provided all the funds, then the focus of activity for teacher organizations would shift to the state capitals. Collective bargaining based upon a labor-management model would give way to more political lobbying efforts. These efforts are, of course, already underway in all the American states, but they would be intensified under full state assumption. Teacher strikes would no longer be isolated affairs occurring in a few school districts, but rather labor actions would be on a statewide basis. Questions have also been raised about the single salary scales that would probably come about with full state assumption. This may seem strange to a reader from a country in which there is only one salary scale for the entire nation. However, teachers from the more affluent American school systems can be expected to fight to protect their higher salary scales, just as much as the local school board members and the administrators from the wealthy districts. Questions are also raised about the size of the bureaucracy needed to handle full funding from the state level.

For a variety of reasons then, abandonment of the American practice of raising at least some funds at the local level for elementary and secondary education is not apt to occur. What other solutions are possible? Consolidation and reorganization of the subordinate local school districts is a second solution advanced for the equity problem. And indeed consolidation and reorganization of the local school districts has been underway for many years in the United States. At one time virtually every one-room rural school in the United States was its own governing unit.

In the State of Illinois alone there were 12,000 local school districts. Illinois still has over 1,000 local self-governing districts, a total exceeded only by Nebraska, Texas and California. However, consolidation can affect the equity problem only as long as wealthy school districts are merged with poor school districts. In many states there are considerable legal defenses a wealthy district can use to avoid consolidation with a poor school district. There is also the matter of the juxtaposition of poor districts with wealthy districts. Empirical research has shown that, especially in American metropolitan areas, poor districts are clustered together geographically, and wealthy districts are clustered together geographically.(23) In such situations consolidation would simply result in big poor districts and big rich districts. The judgment has usually been, therefore, that consolidation and reorganization can help the equity problem, but it can not, alone, solve the equity problem.

This brings us to the third and most popular solution attempted to the equity problem in the United States. This consists of general purpose grants-in-aid passed from the state governments to the local school districts. The taxing power of the superior level of government is called in to redress the inequalities of wealth among the subordinate levels of government. Grants are provided inverse to local wealth. The poorer a local American school district is, the more it receives from its state government, and the richer a local American school district is, the less it receives from its state government. This provision of more funds to the property-poor districts and less to the property-rich districts, called "equalization" grants, is present in all American states except North Carolina. Readers in Commonwealth countries who are interested in this kind of equalization grant between the central government and subordinate governments will find a vast amount of literature in American school finance on this subject.(24) It is not overstating the matter to say that whole professional careers have been made by individuals who are knowledgeable about the details of these kinds of grants-in-aid.

Fundamentally there are only two models of general grants-in-aid from the central government to the subordinate governments. The first type, known as the "foundation" grant or the "Strayer-Haig" grant (named for two professors at Columbia University in the 1920's who made that type of grant popular), sets a fixed dollar amount per pupil which the state government will guarantee for each local school district. When a required tax rate multiplied by the assessed valuation of the local district does not yield this guaranteed level of spending, the state government will make up the difference. Under this system, the local district is required to exert only the required or mandated tax rate, sometimes called a "chargeback," and the state government does the rest. The amount of general state aid dollars the district receives is then a function of only two variables: its relative poorness in property valuation, and the number of school children in the district. Adopted in east coast and middle western states in the 1920's and in the western part of the United States and the south in the 1930's and 1940's, this remains the most popular type of general grant-in-aid, used by approximately 38 states as of June 1980.

The second model of general grant-in-aid goes under several names: "percentage equalization, guaranteed valuation, guaranteed tax yield," etc. Under this second general state aid system there is no single amount guaranteed by the state government for each local school district. Rather, the guaranteed amount will be different from one local school district to the next depending upon either the district's expenditure level, or the district's tax rate. These types of grants are often referred to as "local incentive" grants since, all other things remaining equal, if the expenditures are increased at the local level or the tax rates are raised at the local level, the district receives more general state aid. Thus in this type of general purpose grant, state aid is a function not only of relative poorness in property and the number of pupils, but it is also a function of either the district's spending level or its tax rate. Incentive type grants are very hard to reconcile with local property tax relief, another political goal sought by some of the members of state legislatures. In recent years quite a number of states have used "combination" systems. That is, a foundation program may be in existence simultaneously with a smaller "incentive" type of grant.

General purpose grant-in-aid in the United States also features something known as "pupil weights."(25) A pupil with special educational needs, or a district with special educational needs, is assigned a multiplier, which in effect places a "bounty" on that type of pupil and makes the pupil more important for state aid purposes. Ideally these "weights" are determined from cost studies which show that certain kinds of educational programs are more costly than other kinds of programs, and thus should be funded at higher levels by the state. Often, in practice, the weights are set on the basis of "conventional wisdom." States vary greatly with regard to how they "weight" their pupils. Some states, Florida, Utah, and New Mexico are good examples, have very elaborate weighting systems with weights attached to many kinds of programs for handicapped and disadvantaged pupils, vocational education pupils, etc. Other states weight only for the added costs of maintaining the higher grade levels--in the U.S. those are the "high school" students (normally grades 9-12 in a 12-year system). This whole "weighting" approach is an attempt to meet the special educational needs of either students or districts. One of the oldest weightings in the United States concerns weights assigned to students or to districts that are sparsely populated. The added cost of operating schools in very sparsely populated parts of the United States has long been recognized in American general purpose grants-in-aid. These "sparcity weightings," present now in 32 states, may be of special interest to developing nations in the Commonwealth.

A current controversy in American school finance concerns which of two ways is more appropriate for meeting special educational needs of students. One school of thought advocates the "weighting" approach. The other school of thought believes that special purpose or "categorical" programs, operating outside the general grant-in-aid system are more appropriate. An example can be found in the way programs for children from low income families, many of them children from cultural and racial minority groups, are funded in the American states. Twenty-four American states have so-called "compensatory" education programs, that is, programs intended to compensate for difficult learning situations prevailing in low income homes. In some of these 24 states--Michigan, New York, and California are good examples--the primary approach is by special purpose categorical funding directed specifically at children from low income homes. One the other hand, some of the 24 states use a weighting approach and direct the funds for low income families through the general purpose formula. In Illinois and Minnesota the weighting is arranged in such a fashion that the larger the concentration of poverty children, the higher the weighting. However, in most states a constant weighting is used for poverty impaction.

There is also controversy about the responsibility of the federal versus the state government for meeting these special educational needs. We have said little in this paper about the role of the federal as opposed to the state government in the United States relative to the solution of equity questions. Indeed, until 1965 the federal government in the U.S. had assumed only a limited role in trying to solve these equity problems. However, since 1965 the federal government in Washington has provided increased aid to children from low income families and to children with physical and emotional handicaps. In fact, educational handicaps caused by the incidence of poverty are now attached in many states by both state and federal dollars. This has produced an "articulation" problem between the federal and state government that is by no means solved. At the present moment special educational needs caused by poverty receive more attention from the federal government than from the state governments in most states. This is through the operation of Title I of the Elementary and Secondary Education Act of 1965, as amended. However some states--Illinois, California, Michigan, etc.--also operate large state compensatory education programs. The federal government has also recently increased its spending for children with physical and emotional handicaps. Federal programs in the United States are all "categorical" or "special purpose" in nature, despite continued agitation from the professional education community for a general purpose grant from the federal level. Certainly, in the last 15 years a dominant theme in federal educational programs has been the equalization of educational opportunity. However, the primary burden of solving equity problems in the United States still remains on the shoulders of the 50 state governments.

Essentially in the United States when the superior level of government is called in to solve the equity problems of subordinate governments, there are two choices. The equity problems can be addressed by the state government or they can be addressed by the federal government. Frequently, the federal government has preferred to address the equity problems by channelling its funds through the state governments. Thus on close inspection one will find that some of the funds the state government is using to solve equity problems are, in reality, originating at the federal level. The complexity arises because all three levels of government in the United States: local, state, and federal, raise funds for public education and then distribute those funds. This is not true in a number of Commonwealth countries.

IV. Evaluating the Equity Status of Finance Systems in American States.

Since the major responsibility for achieving equity goals is still that of the American state governments, one should have thought that the states would have been deeply involved in "monitoring" their school finance systems to see how well those goals were or were not being achieved. However, it has only been in the last five or six years that major "monitoring" efforts have been undertaken. The course of events in most states has followed something like this scenario: A challenge would be launched through the state or federal courts alleging a violation of the state and/or federal constitution. "Blue Ribbon" study groups or commissions would be convened by the Governor, the Legislature, the state department of education, or, in some cases, all three entities. These citizens committees or professional commissions would hire experts in school finance to study the existing school finance structure in the state. In due course, the committees or commissions would report that equity violations were present in the state and recommendations would be made for changing the fiscal structure usually by altering the grant-in-aid system in the state. There is nothing particularly wrong with this "one-shot" commission or committee approach, and in fact some of the reports were quite sophisticated.(26) Since many of the itinerant school finance experts were university professors this process also provided an indirect subsidy to departments of educational administration. The fate of these commission or committee reports varied greatly. To the extent that members of the legislature were made a part of the process, preferably early in the process, the recommendations might well be carried into law. Unfortunately, a great deal of funds and time also went into studies which did not result in new school finance legislation. An interesting historical study could be made of which commissions or committees succeeded in altering the state school finance structure and which did not.

The problem, however, was that when the committee or commission finished its work and handed its recommendations over to the state legislature the process stopped. Usually no agency or individuals were charged with the responsibility of monitoring the effectiveness of the school finance "reform" that had just been passed into law. Most studies did carry computer simulations of what the new money distribution would be like <u>if</u> their proposals were accepted, but the legislature frequently passed the reform with modifications not contemplated by the study commission. There were exceptions of course. One occurred in the State of Illinois where the Illinois School Problems Commission, an agency of the Illinois General Assembly, contracted with a public university to systematically monitor the effects of the grant-in-aid system it had just passed into law. As a consequence, Illinois probably has more information on equity problems than any other state in the Union. Other arrangements for "monitoring" the effects of school finance reforms were also made in Ohio and Michigan.(27)

There is a lesson that can be learned here by Commonwealth readers. With the possible exception of Michigan, most of these "evaluation" of the fiscal structure for education in American states have been carried on <u>outside</u> the state departments of education. To put it in terms more familiar to the Commonwealth reader, these evaluations have been carried on outside the Ministry of Education. We believe this is an important advance in public policy research. It is difficult for the Ministry which has responsibility for the administration of the grant to also evaluate the effects of that grant in terms of a politically charged concept such as equity. The American experience suggests that equity evaluations are best carried out by independent researchers, often though not necessarily, connected with a college or university. The reason is simple. Proponents of a reform do not necessarily make the best evaluators of the success of that reform. Nor do those charged with the task of administering the new law necessarily make the best evaluators of the new law.

In order for these evaluations to take place, that is, in order to determine whether a state is or is not achieving equity goals, these goals must be operationally defined. That operational definition includes both careful conceptual development followed by application of appropriate descriptive statistics. Commonwealth readers will find the impressive work by Berne and Stiefel(28) almost required reading, as well as important contributions by Garms(29), Odden(30), Carroll(31), Harrison(32), and Hickrod(33). These are only a few of the researchers now active in this field. In fact, the "objective" definition of school finance goals is one of the most active areas of research in school finance in the United States with new contributions emerging almost monthly. However, many problems remain to be solved often of a conceptual rather than a statistical nature. For example, take the simple notion of expenditure disparity. Presumably the equity goal is enhanced if the disparity between districts is reduced. However, if one uses total expenditures, then that will include all the state and federal categorical grants that are intended for students with special learning handicaps. A case can be made that expenditure disparity should be studied only after these categorical expenditure grants are excluded from the total revenues. It can also be argued that these expenditures should be corrected for geographic cost-of-living factors before the disparities are measured. There is also a school of thought which believes that the proper role of the state government is to help only the low spending districts, not to hold back the high spending districts. If that is the case, then only the low end of the expenditure distribution needs to be studied. Large cities would argue that disparities are necessary because of their increased costs (the notion of "municipal overburden").

There are also statistical and technical problems connected with the simple measure of disparity. Berne and Stiefel explored many statistical tools to measure disparity: the range, the modified range, the coefficient of variation (the standard deviation divided by the mean and multiplied by 100), the standard deviation of a log normal distribution, the Gini index, etc. etc. And even Berne and Stiefel did not exhaust the statistical possibilities for measuring simple disparity. The National Center for Educational Statistics is currently using the Thiel coefficient rather than any of the descriptive statistics explored by Berne and Stiefel.(34) If these descriptive statistics all yielded the same results there would be little problem, but they do not. As Berne and Stiefel make clear, the choice of the statistical technique is not independent of the values underlying the research effort, and it is certainly not independent of conceptual problems. For example, as previously mentioned, if one really believes that only the disparity in the low end of the expenditure distribution is of interest, then special indicies such as those developed by McLoone at the University of Maryland are more appropriate than any conventional statistic based upon deviations from the mean of a distribution.

The goal of "wealth neutrality" presents even more conceptual and statistical problems than simple disparity. The work of Friedman and Wiseman(35) makes clear that "simple" wealth neutrality is a situation in which expenditures per pupil are not a function of the wealth of the local school district. Usually this is taken to mean not a linear function since possible curvilinear functions are usually ignored. Again it should be noted that the value assumptions are more complicated than the statistical problems. The choice of "wealth neutrality" as a goal, if not just a simple step in value terms, is a major leap. If a state establishes that notion as a goal, the state is saying that consumer preferences, the operation of the market economy, and much more of the "orthodox" paraphernalia of American economics does not apply to school finance. It is saying, in fact, that the quality of a child's education should not depend upon the wealth of the child's parents or his parents' neighbors, and that policy position simply doesn't fit very well with the values underlying a free market economy. But even if that leap is successfully negotiated, there are pitfalls beyond.

"Conditional" wealth neutrality is a different state of affairs. Under "conditional" wealth neutrality the variance associated with certain special district characteristics is removed before the relationship between wealth and expenditures is measured. For example, it may be held that expenditures should not be a function of the willingness of a district to spend on education. This conceptual formulation, unlike "simple" or "basic" wealth neutrality, reintroduces an element of consumer preferences into the model. If it is thought possible to allow the district tax rates to operationally define this "willingness" or these consumer preferences, then it becomes logical to factor out the variance in expenditures and wealth. This approach of holding constant tax rates was used in Illinois evaluations by Schmink et. al.(36) A more elaborate approach, holding constant several district characteristics has been used by Garms.(37)

There are also technical and statistical problems with the measurement of "wealth neutrality" and "conditional wealth neutrality." Just as there are many statistical possibilities in measuring the variation in a set of numbers (disparity) so there are many, many ways of measuring the association between two or more sets of numbers. Berne and Stiefel used the simple product-moment correlation, least squares regression coefficients, elasticities (regression coefficients computed on logarithmic transformations of variables), and a wealth weighted Gini coefficient, they termed the "Hickrod Gini."(38) A matter of some importance in regression analysis is whether population weighted units of analysis are used or whether each number is allowed to have equal weight as in normal regression analysis. If the data are weighted, then large school districts will have more effect on the calculations than small school districts. This may be politically more accurate since large districts have more votes, at least in the lower houses of American state legislatures, than do small districts. Approaches to "conditional" wealth neutrality are also normally in terms of multiple least squares linear regression, with all the problems attendant upon that statistical procedure, that is, autocorrelation, multicolinearity, suppressor variables, etc.

Finally, have the reforms of the 1970's in the American states, which were intended to improve equity in elementary and secondary finance, been successful? Much of the current research effort in American school finance circles is directed toward trying to answer that most basic question. Two multistate surveys of the effect of school finance reform, one by Callahan and Wilken(39) and one by Brown, Ginsberg, Killalea, Roshal, and Tron(40) have revealed "mixed" results relative to the effectiveness of some of the school finance reforms of the 1970's. More recent multistate studies by Odden, Berne, and Stiefel(41) and by the staff of the National Center for Educational Statistics (42) are more optimistic, indicating that while some states do show losses on equity criteria, more states show gains. However, studies of individual states such as those in Missouri and Colorado by Odden(43), Pennsylvania by Harris (44), Rhode Island by Ward(45), Virginia by Salmon and Shotwell(46), and New Jersey by Goertz(47), all indicate less than satisfactory results of the particular school finance reforms in those states.

In addition to the multistate surveys on the one hand, and the single case studies on the other hand, we have a few comparative studies of small sets of states. A most detailed Rand Corporation comparative study by Carrol et.al(48) of five states: California, Florida, Kansas, Michigan, and New Mexico, is essentially pessimistic in tone, but it does indicate that reforms made more improvement in reducing the relationship between revenues per pupil and wealth per pupil than in reducing revenue disparities between districts. Another three state comparative study of Indiana, Iowa, and Illinois by Hickrod, Chaudhari, Hubbard and Lundeen comes to essentially the same conclusion, that is, that wealth neutrality gains exceeded any and all other kinds of equity gains.(49) Comparative studies of small numbers of states can probe more deeply than multistate surveys, and yet avoid the generalization weaknesses of single state case studies. There will likely be more of these types of comparative school finance studies in the future.

With regard to equity gains and losses, one of the most interesting and yet most depressing studies, at least for the would-be school finance reformers, is the longitudinal study of equity goals in Illinois by Hickrod, Chaudhari, and Hubbard. This study shows that the reforms of the summer of 1973 moved the State of Illinois toward equity goals for four years, but then a "counter-reformation" set in and a retreat from equity goals ensued for the next two years.(50) A most fertile field for research will be to try to determine if this "counter-reformation" has occurred in other "reform" states and, more importantly, if it has, what are the political reasons for such a "counter-reformation." Most reformers hope that the Illinois situation is an isolated phenomenon, rather than the norm. Estimates of reform opportunities in the 1980's as pointed out by Odden, Augenblick and McQuire(51) are not as nearly sanguine as opportunities were in the 1970's. If much of the ground is lost from 1970 reforms, it may not be regained for a long, long time.

V. Agenda for Research in Commonwealth Countries

There is a folk-saying in the northeastern part of the United States (New England) which runs: "If it isn't broken, don't fix it." That may well be appropriate here. Only those well acquainted with the details of elementary and secondary finance in each Commonwealth country can judge whether the information presented here is useful for them. If it is, then there would be at least three questions to address. What kind of equity problem exists? How bad is that equity problem? What can be done about it? Some help can be given here on the first question, but the second and third questions need considerable empirical research and on-the-spot field investigations.

A rough six cell typology of equity problems is present in the material presented in this paper. If the equity problems in the country are primarily reflections of social class divisions, they could manifest themselves in at least two ways. First, there could be major differences between the quality levels of privately supported education and the quality levels of publicly supported education. The solution probably then lies at least partially in trying to build up the public sector so that publicly supported schools can compete more effectively for capable students. Second, especially in the still developing nations of the Commonwealth, the equity problem may manifest itself in differences in the quality levels of urban schools versus the more rural schools. Since economic development is usually uneven, the urban schools may have progressed at a much more rapid rate than the rural schools. A partial solution may lie in programs to strengthen rural schools. There are also at least two possibilities if the equity problems are not so much social class as they are artifacts of a federal system of government. If the problem is differences in wealth between subordinate units of government, many of the solutions attempted in the United States that are discussed in this paper would be appropriate. The litmus test here would be the degree to which funds for education are raised at the level of the subordinate government. However, even if no or little funds are raised at the level of the subordinate government, equity problems can still arise. In a federal system of government the subordinate units of government may have different educational needs even though they raise little funds themselves for elementary and secondary education. In that event the solution may lie in developing distribution systems at the level of the central government which will adequately reflect these differences in educational need. In that event, the experience of the United States with "weighted pupils" may be worth investigation. Finally, the equity problems may spring not from either social class differences or from a federal structure of government, but, rather, from differences between individual students. Commonwealth countries may find that their major equity problems lie in greater provision for physically and emotionally handicapped students. They may also find that their real equity problems are with socially and economically deprived students. The Commonwealth countries are heavily populated by cultural and racial minorities and their problems in this area, relative to equal educational opportunity, may be even greater than those of the United States.

The above rough typology is not neat; there are overlapping categories, but it may serve as a place to start the research. Obviously, the equity monitoring can not get very far without good statistical data on expenditures between the private and public sectors, between the subordinate levels of government, and between students with educational handicaps and those without such handicaps. The availability of this data base may not be a major problem with economically developed countries in the Commonwealth, but it could be a serious problem with developing countries. It might not be a bad strategy, therefore, to build up the administrative data base before attempting any equity evaluation.

Finally we will end as we started upon a political note. Research on equity matters may be carried out on a very limited basis by educational administrators alone. However, without the support of elected public officials, or the courts, or both, such research will probably result in very little change in either basic public policy or law. The central argument of this paper has been that the attainment of equity goals in educational finance can not be separated from the broader public policy goals of a democratic society. Therefore, the elected representatives of a democratic society are equal partners, perhaps more than equal partners, in attaining equalization of educational opportunity. A first and necessary step in forging that partnership is to be explicit and clear about the fiscal goals that are being sought, and the practical and philosophical implications of those fiscal goals. If one grants our assumptions, then any training program for educational administrators that does not consider these broad political and public policy matters is inadequate, at least for a democratic society.

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