RESEARCH AGENDA FOR SCHOOL FINANCE REFORM IN ILLINOIS G. Alan Hickrod and Ben C. Hubbard

A Paper Prepared for the Illinois Office of Education August, 1975

Research Report 1-HH-75 Center for the Study of Educational Finance Department of Educational Administration Illinois State University Normal, Illinois 61761

Matters of fact or opinion contained herein are solely the responsibility of the authors and in no way reflect the official policy of Illinois State University. As a part of its public service, the University seeks to promote a systematic and thorough discussion of all public policy matters and supports various types of research activities which contribute to that end.

"Every reform is only a mask under cover of which a more terrible reform, which dares not name itself, advances"

- Emerson

When our friends in the Illinois Office of Education suggested that we compose a paper outlining additional research in Illinois school finance, we hesitated for the first time in many years. Perhaps it was only the hot summer, or the large number of graduate students at Illinois State waiting to be served -- the pupil decline not having reached us at this date. We suspect, however, that it was something more fundamental. It is surely common knowledge that the State of Illinois is currently having difficulty funding the school finance changes that were made in the summer of 1973. We can therefore almost hear the response that will greet this latest outpouring of the academic typewriter in certain quarters: "Good Lord! Here they come again, those crazy professors with their fool schemes that will require more money, when we can't even afford what we were sold in 1973." An honest response, if not an overly friendly one, and deserving of an equally honest answer. In the pages that follow there are indeed ideas that would require more state funds if implemented; we have not disappointed our critics on that score. Never, in all the writing we have done, nor in all the speeches we have given, have we ever once said or even implied that equalizing educational opportunity, or establishing fair treatment among taxpayers, was a job the state could do cheaply and easily. To the contrary, we have repeatedly emphasized that equalizing educational opportunity was a very expensive social goal, and that

once the state was firmly committed to the accomplishment of that goal it would demand a very large share indeed of the state's budget.

There is a way of course that our critics can get rid of us, short of convincing the University to cut our budget, fire us, or do physical violence. They must somehow convince us that the quality of a child's education should depend upon the fortuitous presence of property valuations in a given school district, particularly industrial and commercial valuations. They must also convince us that the individual needs of students don't really matter, and that all that counts is whether a given district has the purchasing power to afford whatever it wants in terms of educational services. That is, we must be convinced that education is no different from automobiles, clothing, or any other consumer good. In the process, they must simultaneously convince us that one taxpayer in Illinois should pay twice the tax rate of another taxpayer, and yet receive only half the level of educational goods and services for this additional effort. Convince us that all these things are necessary and proper conditions of educational fiscal life in Illinois. Do so and we will promise to cease our incessant scribbling on these matters and slink back to whatever quiet oblivion is reserved for tired old professors.

It would, of course, be the height of folly to expect chronic fiscal problems that have existed for hundreds of years to be solved in four years. Surely no member of the General Assembly who voted for the reforms of 1973 thought that. Elsewhere we have evaluated the reforms of 1973 in terms of certain selected fiscal goals and, on the whole, we have found the 1973 reforms to be moving the state in the direction of these goals. (1) But it is an admittedly slow movement, and impatient individuals may wish to push ahead with additional reforms. We would, however, urge restraint and caution. School finance is a tricky area and reforms have a way of backfiring upon the reformers. Therefore, the concepts and ideas presented in the following pages should be subjected to careful empirical investigation before they are transformed into bills for the consideration of the General Assembly. Well intentioned but under-researched legislation will not get any of us where we want to go. Hopefully, this delay will also provide time for the economy to recover and for the state revenues to reverse their recent downward plunge.

At some point, however, serious and responsible individuals must squarely face the question of whether the cost of equalizing educational opportunity does not automatically require an increase in the Illinois state income tax rates, the sales tax rate, or both. Such an action may be inevitable. The answer to this question turns upon the proportion of educational costs that need to be absorbed by the state government as opposed to the local government in order to narrow the variation in educational service levels. As in so many areas of educational public finance, the "experts" are not in agreement on this vital parameter. About all that can be said with objectivity is that: the greater the variance in local resources, the greater the number of districts, and the more it is thought necessary to reduce the range in expenditure levels, then the larger will need to be the percentage of costs born by the state. Since Illinois is unfortunately a state with a wide range of local resources, with a great

number of districts, and with a fair number of people who are concerned with expenditure differences among students, some have concluded that it might be necessary to go as high as 75% state support. Others, while agreeing that the state should become the "senior partner" in school finance are satisfied with something just over 51%. Those who would settle for the low 50's are more willing to accept expenditure inequalities among students. Over the 75% mark the advocates of "full state assumption" take over and, since they are almost passionately concerned about expenditure differences among students, they would allow very little local support at all. (2)

The timing of a state tax rate increase is a matter of both economic and political climate. Neither seems favorable at the moment. Therefore prudence would probably dictate the serious advocacy only of those proposals on the allocation side that would not require a tax rate increase in the immediate future. This means that serious changes on the allocation side will probably have to be delayed. Perhaps it is necessary to add that while the authors of course accept the political nature of the decision to raise state taxes, we do not necessarily see it as a partisan matter. No matter which party holds the gubernatorial office, or which party holds the majority in the two houses, the same hard choice will have to be made. We have, at least to this date, never found a way to reconcile reducing the variation in educational expenditure levels with tax relief at the state level. Tax relief can be afforded with regard to local property taxes, indeed that may be necessary to accomplish equalization of educational services, but tax relief at the state level does not

seem to be compatible with equalizing educational opportunity. So it is a trade off. Those who desire greater educational opportunity among students in Illinois will have to not only forego tax relief, they will have to accept greater tax burdens, at least at the state level. On the other hand, those who are not so concerned with equal educational opportunity may at least avoid greater tax burdens if they cannot actually get tax relief. Regretably, we can't have both. With these unpopular, but we hope responsible qualifications on the revenue side, we now turn to suggestions for change on the allocation side.

Item #1: A Curvilinear DPE with a Reorganization Incentive

The present "resource equalizer" portion of section 18.8 of the <u>Illinois School Code</u> is expressed in terms of (a) the operating tax rate times (b) the difference between a "guaranteed valuation" and the actual valuation of the district. This is a modification of a system used for many years in Wisconsin and it is quite similar to the current grant-in-aid system in Michigan. (3)

There is no standard terminology in school finance but many would probably call it a "guaranteed tax yield" system or a "guaranteed valuation" system.

The national literature would subsum this system and others like it under the general heading, "district power equalization". (4) DPE systems, however, do not have to be expressed in the terms we now use in section 18.8. An alternative way of expressing the same basic principles is to state grant-in-aid formula in terms of <u>quaranteed expenditure per pupil for each cent of tax locally raised</u>. (5) The state of Colorado for example, uses this type of DPE system and, to a lesser extent, it is also used in Maine, Montana, and Utah.

We believe this alternative notational form may be more flexible than our present language in section 18.8 and, in any event, it will open up some new possibilities for school finance development and research. We shall therefore use this notational system to describe the operations of a possible curvilinear DPE system for Illinois.

Under our present formulation, a unit district taxing at \$2.00 is guaranteed an expenditure level of \$840.00, that is, \$42,000 X .0200. If the district happens to have \$20,000 in assessed valuation per pupil weighted by title one eligibles (TWADA), then only \$400 will be raised locally and the balance, \$440, will be provided by the state. Let us now see if we cannot express the same situation in a different notational form. Assume that the state of Illinois has established a schedule of quaranteed expenditure levels ranging from a base of \$520, the amount guaranteed after the income tax was passed, to a ceiling of \$1260. Assume further that the state then allows districts to select the tax rates they prefer from a lower limit of \$1.08 to a ceiling of \$3.00. If these assumptions are met, then it can be said that the state is guaranteeing \$3.8542 for each cent of tax the local district is willing to levy above \$1.08. This will be true if there is a perfectly linear relationship between the guaranteed expenditure level schedule on the one hand, and the tax rate schedule, on the other hand. If the relationship between expenditure level and tax rate is linear, then the slope of that straight line must be:

$$\frac{\$1260 - \$520}{300 - 108} = \frac{\$740}{192} = \$3.8542$$

Taking our hypothetical unit district which taxes at \$2.00, the expenditure level guaranteed is then:

$$200 - 108 = 92 \times \$3.8542 = \$354.59$$

to which the base of \$520 must be added for a total of \$879.59. Stated in these terms the guaranteed expenditure level is slightly above the level under our present system which would, as we have indicated, be: \$42,000 X .02 = \$840.00. The reason that this is the case is because the \$520 selected as the lower end of the guaranteed expenditure schedule comes from the older Strayer-Haig legislation and not from the "resource equalizer." If the old foundation level had been completely wiped out, a district taxing at only \$1.08 would have been guaranteed an expenditure level of only \$453.60, e.g., \$42,000 X .0108.

We might therefore think of abolishing the old foundation system as a separate allocation mechanism and simply use the parameters in that system as the base of our DPE system. This has political implications that will take time to work out, but it seems a desirable direction in which to move. The older allocation system includes, however, both the flat grants and the so-called "alternate method." Some feel about these elements as many potential conquerors of Switzerland have felt about that country, i.e., it would take more effort to wipe them out than the effort is actually worth. Furthermore, the great difficulty in recent years in passing referenda in even moderately wealthy districts has led a number of school finance analysts to be slightly more tolerant of flat grants. If rich districts simply cannot pass referenda, then the existence of these flat grants is much less disequalizing than was

previously the case. In fact, the state may have a responsibility toward children in moderately wealthy districts whose parents and neighbors refuse to
grant them sufficient funds to maintain their programs in the face of the effects of a high inflation. In any event, let us assume that the flat grants and
the "alternate method" are carried over into the revised law, at least until
a court orders us to do otherwise.

1

Using our new nomenclature we are now in a position to attack a problem left over from the 1973 reform. At the present time, above the rate of \$3.00 in Illinois the principle of "equal expenditure for equal effort" does not hold. If a wealthy district taxes above \$3.00, the yield will be higher than if a poor district taxes above \$3.00. That is, the state currently assumes no responsibility whatsoever to equalize the tax yield above \$3.00. It appears to us, howeyer, that if one really believes in "equal expenditure for equal effort" then the tax rate area between \$3.00 and \$4.00 should be equalized. To do so, however, at the rate of \$3.8542 for each cent of tax levied seems to run the risk of encouraging higher local tax rates than we would like. In other words, while we wish to establish the basic principle of "equal expenditure for equal effort" above \$3.00, we do not want quite that much "reward for local effort" in the system. There is, however, nothing sacred about \$3.8542. So, let us say that from \$3.00 to \$3.50 we will guarantee expenditure levels in Illinois at only half the rate below \$3.00, that is at the rate of \$1.9271. Furthermore, in the remaining area between \$3.50 and \$4.00 we wish to provide even less reward for effort and hence will reward at only \$0.9636 for each cent over \$3.50.

If we had such a system now in Illinois, a unit district that taxed at \$3.75 would determine its guaranteed expenditure level as follows: For the base it would receive \$520. For the 192 cents of tax above the base of \$1.08 it would receive another \$739.97 (192 X \$3.854). The next fifty cents would guarantee it another \$96.35 (50 X \$1.9271) and the final quarter of tax effort would bring it a final \$24.09 (25 X \$0.9636). Thus the guaranteed expenditure level would be \$1380.91. Since the present system allows state participation only up to \$3.00, such a district could obtain a guarantee of only \$1260 under the present law. However, since the suggested slope is less over \$3.00 than it is below, the guarantee is also less than the \$1575 that would prevail if one simply extended the present relationships up to the level of \$3.75 (.0375 X \$42,000=\$1575).

The table below illustrates how such a grant-in-aid system would work for three hypothetical school districts with assessed valuations of \$10,000 TWADA, \$20,000 TWADA and \$40,000 TWADA. Some limitations of this approach are then apparent from the calculations. The incentive to raise tax rates exists to the very top of the guaranteed expenditure schedule only for the 10,000 dollar district, and, in fact, between 3.50 and 3.75 there is no incentive in the form of higher levels of state support even for this relatively poor district. For the 20,000 dollar district there is an actual disincentive to go above 3.00 since this district would receive fewer state dollars per pupil at the higher levels of tax rate. Such districts might nevertheless choose to do this in order to obtain the extra dollars from the local base. It therefore seems that in order to make such a system politically acceptable, it would be necessary to give districts the option of computing their state aid either

at (a) the top of the linear portion of the schedule, that is, at 3.00 and 1260 or (b) in the curvilinear portion of the schedule. This would simply let a district claim the highest level of state dollars that could be provided, similar to the present law. Seen in this light, the added curved portion of the schedule is of utility only to the poorer districts in the state. It is, in fact, a way of rewarding poor districts for extraordinary effort over 3.00. However, the state matching is nevertheless too weak above 3.00 to allow the two poorer districts to achieve equal expenditure for equal effort with the rich district. That is, even at 3.50 and 3.75 with state aid, they cannot equal the rich districts' \$1400 and \$1500 levels. These limitations can be made less restrictive by either (a) raising the upper end of the linear part of the schedule, say to 3.25 and therefore \$1365 before the curvature begins or (b) making the curvature not so steep, say with 2.0000 per each cent of tax effort rather than the calculated 1.9271 and 1.0000 rather than 0.9636. Both alternatives would cost the state more money.

Tax	Guaranteed Expenditure	10,000 TWADA District		20,000 TWADA District		40,000 TWADA District	
Rate	Level	Local	State	Local	State	Local	State
1.08	520	108	412	216	304	432	88
3.00	1260	300	960	600	660	1200	60
3.50	1356	350	1006	700	656	1400	~-
3.75	1380	375	1005	750	630	1500	

Those familiar with national school finance literature will recognize that what we have described is simply the "kinked" or "non-linear" DPE system previously suggested by such school finance experts as Benson, Guthrie, and Barro. (6) We have merely provided an illustration for study in Illinois.

Those with more mathematical training will also see that the entire system is nothing more than a process of making the guaranteed expenditure level a non-linear function of the tax rate chosen. Since there are many, many non-linear functions that might be chosen, so there are almost endless varieties of "curvilinear" DPE systems. For example, it would be interesting to experiment with logarithmic and semi-logarithmic functions of expenditure levels. For that matter, both hyperbolic and parabolic functions are also possible. However, if the curve inflects, that is, stops going up and starts going down, then one must defend a policy of actually penalizing districts for having high tax rates rather than rewarding them for higher tax rates.

The suggested new format can also be structured so that we tackle another problem left over from the reforms of 1973, e.g., the lack of a reward for reorganization in the current Illinois system. Probably the most straightforward way to handle this would be simply to provide a higher guaranteed expenditure schedule for those districts that attained a "satisfactory" size. Let us say the schedule would provide an extra \$50.00 per pupil at all points, that is the range would be \$570 to \$1310, the slope or reward for effort remaining at \$3.8542. The higher schedule would also be maintained in the region between \$3.00 and \$4.00. We would emphasize that we are talking about size and not organizational form. From a purely economic perspective, diseconomies

of scale are matters of size not organizational form. The encouragement of the formation of unit districts may be desired on educational grounds, e.g., coordination of curricula, etc., but there may still be economically disfunctional unit districts that are too small or too large. To be able to determine whether a district should be on the higher or lower guaranteed expenditure schedule we need some evidence on "optimum" district size relative to cost. Unfortunately, the only "optimum" district size-cost study done in Illinois that we know of is now considerably out of date. (7) If new evidence on this point could be gathered, the higher level schedule could be reserved only for those districts above the "optimum" e.g., "least cost" point on the size-cost curve.

A "curvilinear" DPE with an incentive for district reorganization provision is depicted in the graph at the conclusion of this paper. The parameters suggested: tax rates: 1.08, 3.00, 3.50, 4.00; lower schedule: 520, 1260, 1356, 1404; higher schedule: 570, 1310, 1406, 1454, are good first approximations but there is nothing magical about any aspect of the graph. For example, the amount of state funds required is a function of the steepness of this curve. If the state chose to guarantee less than the rates of \$3.8542, 1.9271 and 0.9636, then fewer state dollars would be required. Extremely flat DPE systems would, however, restrict state dollars to only very poor districts since the application of even modest tax rates on the higher valuations would provide more dollars than the guaranteed expenditure levels in such flat structures. Extremely flat DPE functions would also mean that the proportion of educational

expenditures provided by the state was low and hence the proportion of total expenditures provided by the local district was high. This, in turn, would mean that the state was doing very little to solve the inequality problems which are greatly magnified in states with high proportions of dollars coming from local tax sources. As we indicated previously, if the state is truly committed to solving inequality problems between students and taxpayers, then a fairly steep DPE system is required, and concomitantly a rather large amount of state dollars. Curvature of the DPE structure can also take place below the \$3.00 point, with a subsequent lowering of requirements for state dollars, and a similar lessening of what is done about expenditure inequalities. Similar schedules will need to be developed for high school districts and elementary districts.

We would close this discussion by noting that the modifications we are suggesting here are not consistent with the so-called "roll back" provisions in the present law, and would, if adopted, replace those provisions. The "roll back" denies the opportunity to a district to gain funds from the DPE system if it taxes over \$3.00. Both rich and poor schools are equally denied this opportunity. The system we have described here would not only allow, but would require DPE payments over \$3.00 to the absolute level limit of \$4.00, however, these state aid payments would be at a rate considerably below the payments made below \$3.00. Equalizing the remaining \$1.00 of tax rates in Illinois is perhaps more in keeping with traditions of local control than is the "roll back." In giving up the "roll back", however, certain other

objectives either will not be met, or will be met less well. The most obvious is the objective of local property tax relief. The "roll back" was engineered to bring about an actual reduction of some high local tax rates and not simply a leveling off of those high local property tax rates. Extending the DPE system will also not automatically bring the state closer to fiscal neutrality and a narrowing of the expenditure levels. In fact, should there now or sometime in the future be many more rich districts taxing over \$3.00 than poor districts it might well have the opposite effect. However, this is true for the entire DPE concept. If, in the long run, rich districts tax more than poor districts, it will be a long time indeed before fiscal neutrality is attained. The sad fact is that we do not really know whether "reward for local effort" will, in the long run, work for or against poor school districts. We will discuss this important point in more detail at the conclusion of this paper.

Item #2: Inflation and Loss-of-Pupil Factors

The two giant blades of a scissors cutting into most school districts in Illinois are inflation and loss of pupils. We feel that the present grant-in-aid system should take both of these forces into account. Let us first deal with the inflation factor. If one were operating in the older notational system, one could escalate the guaranteed valuation each year by a cost of living index, or perhaps follow the Wisconsin practice of escalating the guaranteed valuation each year by a stated percentage, at present 4% in Wisconsin, or even perhaps follow the Michigan practice of stating in the law a higher level for each of three subsequent years. In the new notational form we have been discussing

in this paper, it will be necessary to raise the entire expenditure schedule upward to offset inflationary trends. That is, one applies the cost of living index, or percentages, or stated amounts to both the \$520 figure and the \$1260 figure simultaneously and thus, in terms of the graph at the end of this paper, lifts the DPE schedule upward toward the top of the graph. There is an option to this, in that one could apply the inflationary increases to the slope, e.g., to the \$3,8542, \$1.9271, and \$0.9636. However, this action would increase the "reward for effort" aspects of the DPE system as well as offset the inflation. In our judgment we probably already have enough "reward for effort" in the Illinois system at present, perhaps too much. In our judgment the addition of an inflationary correction to the Illinois formula should be a matter of highest priority since the major weakness of the old Strayer-Haig system was exactly in this area, and there is some reason to fear that the DPE system may fall victim to precisely the same disease. The need for this correction is of course a direct function of the rate of inflation. If present inflation rates continue, the need will be very apparent in only a few years. Most of the increases in state aid have been, and will be, used up by merely keeping pace with the inflation.

Loss of pupils is a much more difficult matter to handle. We have shown elsewhere (8) that the increasing dependence upon state aid, whether in the form of a new DPE system, as is the case in Illinois, or in the form of higher foundation levels, as is the case in other states, will result in much more serious losses in state aid with the onset of pupil decline. It is simply a

matter of the more you get from the state, the more you stand to lose from the state with the loss of each pupil. There is not a single grant-in-aid system in the entire United States that we know of that will not reduce state funds as pupils are lost. It seems to us, therefore, that the only defensible posture the schools can take is to ask the legislature for a "cushioning factor" in the grant-in-aid system. A task force attached to the State Superintendent's office is presently exploring some of these possible "cushioning factors." The rationale for these factors lies in the fact that costs cannot be reduced as fast as pupils decline. Among the possibilities are the following. One could use a three year moving average of TWADA, dropping off the earlier year every time a new year is added. Another possibility is to count only the loss of pupils up to a certain percentage in a given year; for example, currently Kansas will count no more than a 10% loss in a given year. This seems unusually high but one could also use a lower figure, say 5% or 3%. More complex adjustments are also possible, like counting only 25% of the pupils lost in the first year, 50% in the second year, 75% in the third year, and the whole loss in the fourth year. In effect, such a proration system would allow the district four years to adjust to the loss of a single pupil. The loss could also be phased in over more than four years. Since most of the costs of education are in personnel costs, what one is really talking about here is the time it takes to reduce the staff, and this might well take more than four years.

Loss of pupils also causes another phenomena in state aid formulas, i.e., the drift of districts into a non-equalization status. In the system we are currently using in Illinois, this occurs as pupil losses drive districts over the

\$42,000 figure or similar guaranteed levels for dual districts. It is naive, of course, to believe that this is a result of a DPE system. The same thing would occur in the Strayer-Haiq model as more and more districts found they could raise more than the foundation level by application of a given tax rate to an increasing valuation per pupil. The fact is that both inflation and the loss of pupils interact to make more and more districts look wealthier and wealthier in terms of a stationary or fixed set of parameters in any state aid formula. Therefore inflationary adjustments are needed not only to keep up with the general drift of the economy, but also to keep a reasonable number of districts in an equalization status relative to the grant-in-aid system. Viewed in this light, the somewhat wealthier suburban school districts of the northern part of Illinois have a very important stake in pushing for an inflationary adjustment in the grant-in-aid system. Very poor districts are also badly hit by loss of pupils since they depend so heavily upon state aid rather than their own meager resources. Hopefully pupil loss is occurring in a random fashion or near random fashion relative to wealth. If it turns out that the poorer districts are losing pupils faster than the wealthy districts, then their plight would be great indeed. Some research in progress at Illinois State University on pupil decline may cast more light on this later in the year.

Item #3: Addition of an Income Factor and Raising the Weighting for Title
One Eligibles

Evidence now available makes it clear that rural school districts in Illinois did not profit as much from the reforms of 1973 as did both suburban and

central city school districts. (9) This is due to the presence in rural areas of relatively high property valuations, relatively low tax rates, and relatively low concentrations of title one eligibles. It is also quite clear now that rural school districts would profit greatly from the introduction of an income factor into the formula. Income wealthy suburban districts and their representatives will not be wildly enthusiastic about the notion of adding an income factor. In fact, upper income families, no matter where they reside, cannot be expected to support this idea with any degree of vigor. Recent studies of the cost vs. direct benefit to upper income groups strongly suggest that a negative transfer occurs here, that is, upper income families pay more than they receive relative to K-12 education. This is, of course, immediate benefits, not long term social benefits. (10) Rural areas can also not count on the support of central cities in this matter. Central cities receive more state aid by introducing poverty correlates, not by introducing average measurements of wealth, into grant-in-aid formulas. There is some evidence that suggests that central cities might be more able to accept median family income than either income per pupil or income per capita in grant-in-aid systems. (11) Central cities are not all alike, however, and the loss of state aid by the introduction of an income factor would be greater in some central cities than in others.

Rural districts might get the support they need for an income factor by agreeing to support an increase in the title one weighting. An increase in the title one weighting would protect most central cities and a few suburbs, the poorer ones, against a state aid shift caused by the introduction of an income

know of no studies that place the extra costs of compensatory programs as low as 1.375 or even 1.45. There are some states that place this weighting at 1.50, however, as Levin has pointed out, <u>all</u> these weightings are based solely upon "present practice" cost differentials and not upon any measure of what these extra dollars buy. (12) Given that consideration, it is especially important not to consider any pupil weighting as "etched in stone."

The income factor could be introduced either as a weighting on the property valuation or as a weighting on the tax rate. In the form we discussed in the first section of this paper, it would be more convenient to introduce the factor as a weighting on the tax rate. It would be useful to experiment with the type of income factor used in the states of Rhode Island and Connecticut, e.g., state median family income divided by median family income in the school district. This could be a multiplier attached to the tax rate. Income poor districts would have their "effort" increased and income wealthy districts would have their "effort" decreased. It would probably be more politically acceptable to operate the multiplier only in the positive sign, e.g., no penalty assessed against the wealthy. It continues to disturb us that income data from the federal census is the only kind of district income data available in Illinois. In spite of endorsement by many educational groups, a bill to require the school district number to appear on the state tax forms has never gotten out of committee. However, since median family income in a district changes more

slowly than per pupil or per capita measures, perhaps this decenniel census data is still workable in a state aid formula. Fortunately the census of population data is now available by school district and has received considerable scrutiny from sociologists and demographers. (13)

There is an alternative to introducing an income factor that needs at least some discussion. This is the procedure known in public finance circles as the "circuit breaker." At present we have this type of coverage for older citizens in Illinois, but other states have extended it to lower income families as well. The "circuit breaker" is fundamentally a tax relief concept, working on the principle that property taxes should not exceed a stated percentage of either an elderly family's income, or a low income family's income, or both. Benson and his colleagues make a good case for adopting a "circuit breaker" wherever the DPE system has been put into effect. (14) Basically, Benson is concerned with low income families that happen to live in property wealthy districts. Should these districts raise their normally low tax rates to take advantage of the DPE system, the burden on low income families in these districts would be severe. However, the point we wish to make here is that the circuit breaker is not a proposal to equalize educational services. It does speak to the question of taxpayer inequalities but not to the question of inequalities in service levels among students in rich and poor districts. Viewed in this light they are not really alternatives. Since they both cost the state funds, the circuit breaker in foregone tax revenue, and the income factor in more distribution money, they may nevertheless be coupled together. On the whole

we tend to place a higher priority on the inclusion of the income factor than on extending the circuit breaker. The very limited success of educational tax referenda in recent years does not suggest to us that great numbers of low income families are being trapped in districts which are rapidly raising their property tax rates. However, if quite a number of districts should start responding to the "reward for effort" now in the system, then we might have to re-evaluate our position on this matter. Groups other than low income families who believe they bear a disproportionate share of the property tax burden, such as family owned farms, may also push for extension of the circuit breaker.

Item #4: Matters of More Darkness than Light

We will conclude by briefly noting two topics on which we need much more information. One of these is of concern only within Illinois and one is of much broader interest. The Illinois oriented matter concerns the effect of removing the corporate personal property in 1979. We have had some studies on the revenue side of this question but very little is known of the distributive effect of the removal of this proportion of the property valuations. It is obvious that it will change greatly the rank order of school districts. Districts with large industrial and commercial valuations will find themselves poorer in local resources and dependent more upon state aid. It is not at all clear at this moment whether the total local revenue loss in many of these formerly wealthy districts will be made up by the state. The constitution of Illinois does contain a "replacement" clause, but the exact manner and timing of the "replacement" is still very much a matter of debate. The costs to the state are surely going to

be sizable and may well contribute to the "inevitable" increase in income tax rates that we mentioned earlier in this paper. A study is underway at Illinois State University on some aspects of this situation. (15)

Of more national concern is the continued evaluation of the Illinois DPE experiment. It would be fair to say that DPE is now an "in" thing in school finance circles. By our last tabulation the states that have some kind of "quaranteed tax yield" system, like the Illinois "resource equalizer," include: Colorado, Utah, and Montana in the west; Kansas, Wisconsin, Illinois, and Michigan in the middle west; and Connecticut, New Jersey and Maine in the east. A total of ten states. As this paper was being written two other states, Texas and Ohio, were expected to adopt some form of DPE system. These twelve states do differ considerably among themselves. In some states the "reward for local effort" is considerable, but in others it is only a minor part of the distribution formula. We also have five other states at our last tabulation which were on a distribution plan known as "percentage equalization" which is also a "reward for local effort" or "local incentive" system: New York, Rhode Island, Massachusetts, Pennsylvania, and Alaska. In the last few years it has become quite difficult to keep these states categorized correctly, but we appear to be moving toward a situation where about twenty states will have some form of "reward for local effort" or a "local incentive" provision. Even so, this does not mean that the "reward for local effort" idea is accepted in all quarters. At least two states, Florida and Iowa, did experiment with a local incentive provision but then dropped that system as

not appropriate for their particular states. One can also observe the total absence of any southern state from the DPE grouping. "Reward for local effort" does not apparently find favor with southern educators. This may be due to complex racial and historical factors, but it may also be due to the lukewarm acceptance of DPE by the influential members of the Institute for Educational Finance at the University of Florida. (16)

From our investigations in Illinois we have some notion of the immediate or short-run results of adopting a DPE system. (17) What we do not have, nor as far as we know does anyone else have, is a good evaluation of the longer run effects of DPE systems. Since most research is ex-post facto, this is not surprising. However, once the Illinois system is fully funded, and that apparently will not be now until 1977, we should be able to see some of the longer term effects of this system. Within another year or so the effects of the system on local tax referenda should be observable. Unfortunately, the success or failure of local tax referenda are due to all sorts of variables not the least important of which is the general state of the economy. However, if more poor districts pass referenda after 1973 than before 1973, we will have some rough evidence to offset the fears of many that DPE will simply be exploited by the richer districts and not the poorer districts.

Summary:

We have discussed eight matters relative to the Illinois general purpose educational grant in-aid that might be subjected to further research and

development. These are: (a) the use of a notational system based upon the concept of a guaranteed expenditure for each cent of tax effort, (b) the possibility of adding a curvature to the present DPE system. (c) the addition of a reorganization and consolidation incentive, (d) the addition of an inflation factor, (e) the addition of a "cushioning" factor to offset loss of pupils, (f) the addition of an income factor, (g) the effect of the removal of the corporate personal property on the distribution of state aid, and finally, (h) the continued evaluation of the equity effects of the DPE or "reward for effort" system. This by no means exhausts the list of possible research topics in Illinois school finance. For example, we have said nothing of aid to special education, aid for buildings and maintenance, aid for transportation, etc. Nor have we even once mentioned an entire category of research needs under the heading of increased efficiency of the schools rather than increased equity. Given the resources available to do the research, however, we may have said quite enough.

We have also been almost brutally frank concerning the need for more state funds to attack the basic equity problems remaining in Illinois school finance. We have warned, yet again, that equalization of educational opportunity is an expensive social goal. Ultimately each educator, each elected official, each appointed official, and indeed each voter and each taxpayer will have to examine their own priorities to see if they are willing to pay the price for achieving a greater degree of equity among students. It is surely true that when people are unemployed, when they are in ill health, in need of housing, food, police protection, and fire protection that there are undeniable competing needs

in the public sector. The authors have elsewhere stated their steadfast belief, however, that the provision of K-12 education is a "unique" public function, and that the attainment of equal educational opportunity is, in fact, essential to the basic well being of our form of government and the health of our society and our civilization. (18) The coming of the bicentenniel provides an excellent opportunity for those who believe as did Thomas Jefferson, Horace Mann, and Caleb Mills: that broadening educational opportunity is essential to a democratic society, to once again forcefully rededicate themselves to this noble goal. No amount of practical politics, temporary budget cuts, revenue shortfalls, and other inconveniences of this all too real world should sway them from the completion of their appointed task. Indeed, if our cause is really as just as we think it is, then we are compelled to answer our adversaries as did the people to King Rehoboam so many centuries ago, "... to your tents, O Israel, now see to thine own house, David."

Notes and References

- 1. Hickrod, G. Alan, Thomas W. C. Yang, Ben C. Hubbard, and Ramesh Chaudhari. "Measurable Objectives for School Finance Reform: A Further Evaluation of the Illinois School Finance Reforms of 1973," A paper presented to the 1975 Annual Meeting of the American Educational Research Association, Washington, D. C.; see also Hickrod, G. Alan, Ben C. Hubbard, and Thomas W. C. Yang. The 1973 Reform of the Illinois General Purpose Educational Grand-in-Aid, National Conference of State Legislatures, 1150 Seventeenth St., N.W., Washington, D. C., reprinted in Tron, Esther O. (ed.), Selected Papers in School Finance, 1974, U. S. Department of Health, Education and Welfare, Washington, D. C.
- 2. For a "full state assumption" proposal for Illinois see Wise, Arthur, and J. Alan Thomas, chapter five, <u>Final Report of the Superintendent's Advisory Committee on School Finance</u>, 1973, Illinois Office of Education (available as document #ED 078 550 in the ERIC system).
- 3. See chapter I, Hickrod, Hubbard and Yang, op. cit.; see also Garber, Lee O. and Ben C. Hubbard. Law, Finance and the Teacher in Illinois. 2nd Edition, 1975, Interstate Printers and Publishers, Danville, Illinois.
- 4. For recent treatments of DPE systems see: Guthrie, James, Equity in School Financing: District Power Equalizing, 1975, Phi Delta Kappa, Bloomington, Indiana; Grubb, W. Norton and Stephan Michelson, States and Schools, 1974, D. C. Heath and Company; Benson, Charles S., Paul M. Goldfinger, E. Gareth Hoachlander, and Jessica S. Pers. Planning for Educational Reform, 1974, Dodd, Mead and Company; Barro, Stephen M., "Alternative Post-Serrano Systems and their Expenditure Implications," in School Finance in Transition, 1974, Ballinger Publishing Company, Cambridge, Mass.; Cohn, Elchanan, Economics of State Aid to Education, 1974, D. C. Heath and Company.
- 5. The analysis presented in this paper bears some similarity to notions published earlier by Raymond L. Lows and Robert Pyle. See chapter four of Final Report of the Superintendent's Advisory Committee on School Finance, op. cit. The authors are indebted to Lows and Pyle for stimulating our thinking in this area.
- 6. See the references in footnote #4.
- 7. Sabulao, Cesar M., and G. Alan Hickrod. "Optimum Size of School Districts Relative to Selected Costs," <u>Journal of Educational Administration</u>, 1971, 9 (2), 178-191.

- 8. Hubbard, Ben C., Robert A. Burnham, and G. Alan Hickrod. Chapter III, Report of the Illinois School Problems Commission, No. 13, 1975, the Commission, Springfield, Illinois.
- 9. See the references in footnote #1.
- 10. Alexander, Kern, and Thomas Melcher. "Income Redistribution and the Public Schools," also Holland, David W., "Income Distribution Effects of Public Education Expenditures: Common Schooling and Higher Education," in <u>Proceedings of the 17th National Conference on School Finance</u>, 1975, Institute for Educational Finance, 1212 Southwest 5th Ave., Gainesville, Florida; see also Muller, Thomas. <u>Income Redistribution Impact of State Grants to Public Schools</u>, 1973, Urban Institute, Washington, D. C.
- 11. Hou, Daniel J. "A Study of the Effects of Selected Variables on the Distribution of State Aid to Education in Illinois," dissertation in progress, Illinois State University, 1975.
- 12. Levin, Henry M. "Some Methodological Problems in Economic Policy Research: Determining How Much Should be Spent on Compensatory Education," Education and Urban Society, May, 1975.
- 13. Pohlmann, Vernon C. "Evaluation of 1970 Census School District Tapes," Review of Public Data Use, July, 1974.
- 14. Benson, Goldfinger, Hoachlander, and Pers, op. cit.
- 15. Pierson, Max. "Corporate Personal Property Tax: The Effects of Article IX, Section 5 of the Illinois Constitution of 1970," dissertation in progress, Illinois State University, 1975.
- See for example, pp. 264-265, Johns, Roe L., and Edgar L. Morphet. 16. The Economics and Financing of Education, Third Edition, 1975, Prentice-Hall; also Jordan, K. Forbis, and Kern Alexander. "Constitutional Methods of Financing Public Schools," in Alexander, Kern, and K. Forbis Jordan. Constitutional Reform of School Finance, 1972, Institute for Educational Finance, op. cit.; see also Financing the Public Schools, report of the Phi Delta Kappa Commission on Alternative Designs for Funding Education, 1973. Phi Delta Kappa. Bloomington, Indiana. The PDK national commission was willing to accept a limited amount of DPE. Its exact recommendations are worth quoting: "The commission prefers a combined educational fiscal system which features a foundation system supplemented by equalized local initiative. The commission also recommends that the foundation level be kept rather high, that the equalized local initiative schedule be kept rather short, and that there be a full and adequate measurement of educational needs." Professor Hickrod was a member of the PDK commission and does subscribe to its major recommendations.

- 17. See the references of footnote #1.
- 18. Some of the social, economic, and political values underlying the proposals of the authors in the school finance field are found in two articles: Hickrod, G. Alan, and Ben C. Hubbard. "Social Stratification, Educational Opportunity, and the Role of State Departments of Education," Educational Administration Quarterly, Winter, 1968; also Hickrod, G. Alan, Ronald L. Laymon, and Ben C. Hubbard. "Toward a Political Theory of School Finance Reform in the United States," Journal of Educational Administration, November, 1974.

Curvilinear DPE Reorganization Incentive

