

A COST-SHARING PROPOSAL FOR THE INVESTIGATION OF CHANGES
IN THE ILLINOIS GENERAL PURPOSE EDUCATIONAL GRANT-IN-AID

submitted to

THE NATIONAL CONFERENCE OF STATE LEGISLATURES

by

THE ILLINOIS SCHOOL PROBLEMS COMMISSION

and

THE CENTER FOR THE STUDY OF EDUCATIONAL FINANCE,
ILLINOIS STATE UNIVERSITY

February 1, 1976

I. Background

Institutional arrangements in school finance normally change by "evolution" rather than by "revolution." There do occur, however, instances in the history of a state in which rather drastic changes in educational financial arrangements take place. Such a change occurred in the summer of 1973 in Illinois. At that point in time Illinois abandoned, to a large extent, its forty-six year old Strayer-Haig, or "foundation," approach to educational grants-in-aid for the K-12 jurisdiction and adopted instead a "district power equalization" (DPE) approach. Within Illinois this grant-in-aid is referred to as the "resource equalizer" option in the current K-12 finance law. Details of this grant-in-aid system are set forth in several publications. (1) Basically, it is a grant-in-aid system in which the state aid is determined by multiplying the local operating tax rate by the difference between (a) the state guaranteed valuation and (b) the actual property valuation of the individual school district. The term "guaranteed tax yield" or "guaranteed valuation" is also used in many states to describe this approach. (2) Experts will differ on their count of states with K-12 allocation systems of this nature, but it is probably reasonably accurate to say that Illinois is one of approximately eleven states with generally similar "district power equalization" systems and is also one of a larger group of twenty-one states that have some general form of "local incentive" or "reward for local tax effort" in their K-12 finance laws. It is a longstanding characteristic of K-12 finance in the United States that each state's allocation system has either (a) some characteristics that

It shares with only a few states or (b) some characteristic that it shares with no other state. For example, Illinois currently shares with three other states, Pennsylvania, Ohio, and Minnesota, the practice of weighting pupils based on the concentration of Title I children in a given school district, as well as, or in preference to, the simple count of eligible pupils, in their state aid formulas. Illinois is, however, probably unique in retaining within its school code two completely different funding systems, e.g., the district has the option of selecting either the old Strayer-Haig allocation system or the newer DPE system. It is true that Maine and Montana did use their old foundation system as a base for their new DPE system, but no state probably has the complexity of two distinct allocation systems in their current law.

Since 1973, the Center for the Study of Educational Finance at Illinois State University, with the considerable assistance of the Illinois Office of Education and the Illinois School Problems Commission, has been engaged in a continual monitoring, evaluation, and analysis of the reforms of the summer of 1973. The basic approach at the Center has been to establish state fiscal policy goals such as "attainment of fiscal neutrality" and "reduction of variation in expenditure per pupil" and then to see if the reforms of 1973 have moved the state of Illinois in the direction of these goals. The Center staff conceive this to be an application of the widely supported notion of "management by objective" at the state, rather than the local, level of educational administration. These fiscal policy objectives are not, of course, arbitrarily selected by the staff of the Center. Rather, they are objectives mentioned frequently in the legislative debate that accompanied the passage of the reform

legislation in the Illinois General Assembly in the summer of 1973. To accomplish this evaluative task the staff of the Center has devised modifications of basic econometric tools such as the Gini Index, the Lorenz Curve, and the linear regression analysis to give operational definition and measurement specificity to high level verbal generalizations such as "fiscal neutrality." Detailed exposition of these measurement techniques have also been set forth elsewhere. (3) In addition, standard descriptive statistics supplemented by simple tables, charts, and graphs have been used to analyze the effects of the 1973 reform in Illinois.

The 1973 reform was planned to be phased in over a four-year period of time; however, current revenue shortages strongly suggest that it may well be five years before the 1973 reform is fully operative. Our research findings for the first two years of this phase-in period are generally supportive of the reform, that is, the 1973 legislation does appear to be moving the state of Illinois toward the selected fiscal policy goals. Recently, with the valuable assistance of the National Conference of State Legislatures, the Center was able to apply its evaluative criteria and measurement techniques to data in the states of Michigan and Kansas. (4) The results of the analysis for these two states are similar to those for Illinois, e. g., the 1973 reforms in those states have also moved the states toward goals such as the attainment of fiscal neutrality and the reduction of variance in expenditures between school districts. Our findings are, of course, short term in nature, that is, they are limited to situations existing in all three states in the first two years after the major reform.

The Center is presently beginning the third year evaluation of the 1973 reform. Funds are not sought in this proposal for that purpose. It is true that recent reductions in university funding threaten all university connected school finance research including the activities of the Center at ISU; however, barring further budget cuts, there will be enough resources to complete the third year analysis. Whether funds would be available for a fourth year analysis is more debatable and depends largely upon the fate of the university budget requests for fiscal 1977. Our major need for funds is not, however, to merely extend the kind of analysis we have been conducting in the last few years. Rather, our need for funds now springs from the desire to investigate the proposals brought to the Illinois School Problems Commission by the members of the General Assembly. With the benefit of two and one-half years of hindsight it is clear that there are certain omissions in the reform of 1973. Various members of the General Assembly have recognized these omissions and have suggested corrections to the basic law. Unfortunately there are not sufficient resources with either the Illinois School Problems Commission or with the Center to explore all these suggestions, and in particular to analyze the proposed changes in the light of state-wide objectives. The Illinois School Problems Commission has limited "in-house" research and must contract out for any extended research activity. As a partial result of this situation there is a tendency for each legislator to put forward bills helping his own constituency without much analysis of the state-wide effects of the proposal. Granted this tendency would exist anyway, but

it is aggravated by the lack of any means of exploring the implications of the legislation on a relatively short turn-around basis.

It is true that individual legislators, particularly if they are in leadership positions in the two houses, can sometimes persuade either the Illinois Office of Education or the Governor's Bureau of the Budget to explore their suggested changes in grants-in-aid. It is also true that the Illinois Office of Education is the sole supplier of data for these grant-in-aid simulation studies and cooperation on their part is essential if any study at all is to be done. However, it does not seem in keeping with the American concept of "separation of powers" for the legislative branch to be so dependent upon the executive branch for analytical work on educational grants-in-aid. When the Center was established at ISU a central thrust of its work was to be the investigation of potential educational finance legislation emerging from the legislative rather than the executive side of Illinois government. University budget cuts have not enabled this notion to come as yet to fruition but it remains an important goal of the Center.

In the pages which follow we have indicated some of the proposed changes in the Illinois grant-in-aid system which we feel should be explored. Many of these modifications have been suggested to the Illinois School Problems Commission by members of the General Assembly. In each case we have suggested the kind of computer simulations we have in mind. In all of these matters we would expect to evaluate the proposed legislative change by the techniques we have already tested at the ISU Center. That is, in each case

we shall be evaluating the change in terms of state-wide goals such as the attainment of fiscal neutrality and the reduction of variance in educational expenditures. In addition, the simulations will also answer more practical matters such as the cost to the state of the proposed change and the areas of the state that would benefit most or least from the change. Following this outline of proposed grant-in-aid simulations, we shall briefly describe the resources available at the Center to accomplish these studies and then finally submit a tentative budget for these activities.

II. Grant-in-Aid Simulation Studies Currently Needed in Illinois

The simulation studies currently needed in Illinois can be divided into three general categories. The first category is simply an extension of the kind of studies the Center has already been doing. As indicated previously we shall try to carry out efforts in this category with our current level of university support. Second, there are a series of simulations that need to be done which will work a number of rather specific adjustments into the current law. Many of these have been suggested already by members of the General Assembly. Thirdly, there are also simulations that need to be done based upon assumptions requiring fundamental changes in the allocation formula. Since the funds requested here will not cover all the possibilities outlined below, we will need to establish priorities for the simulations. We could establish these priorities with only the input of the Center staff. However, it seems more realistic and also more practical to secure the input of the Illinois School Problems Commission and others in the leadership of the General Assembly.

Such a practice will assure that the simulations the Center does will have a better chance of being actually used to change the law in Illinois. The Center also has a legislative advisory group that can be used for this purpose.

Very likely the Center will concentrate on the second category of simulation studies, e.g., those that involve retention of the basic current Illinois formula without fundamental or sweeping changes in the underlying philosophy of school funding in Illinois. We would argue that the current tight revenue situation in Illinois makes this the most practical course to follow. Changes "on the grand scale," the third category, generally require increases of revenue, "on the grand scale," and it is far from clear at this point in time just where these revenue increases could be found.

The first category of simulations does involve simulations of the current formula at "full funding." Presently in Illinois this is a very politically sensitive issue. Candidates for the office of the Governor in this state are in the process of taking various positions on this policy matter even as this proposal is being written. Both the third year and the "full funding" simulations will have to focus upon just what the "shortfall" in funding has meant and will mean in terms of the state's progress toward fiscal neutrality and other state-wide policy goals. The extent of the "shortfall" is relatively clear now for the current fiscal year, but it is still a matter of speculation for the next fiscal year. The exact manner in which the "shortfall" is entered into the calculations needs to be subjected to simulation studies. For example, reducing the phase-in provision to less than 25% each year will

produce one result, but cutting each district's calculation by a set percentage will produce quite a different pattern of fund allocation. If a repeated "short-fall" is expected in the fourth year, these simulations should be analyzed immediately.

Very high on the priority list of the second category of simulations should be adjustments for inflation and also for loss of pupils. These are, in fact, two blades of a giant scissors that are cutting into almost every school district in Illinois. It is particularly unfortunate that the current Illinois grant-in-aid system does not have an inflation adjustment built into the grant-in-aid formula. It was this same lack of an inflation factor that contributed to the partial demise of the older "foundation" allocation system. The existence of two allocation options in the Illinois law immediately causes some concern. Are both the options to be adjusted for inflation? Not to adjust the older foundation option would insure its eventual disappearance from the law which might simplify things greatly but would also cause some problems for certain types of school districts. An adjustment for inflation can also affect the pattern of monies distributed. For example, escalating the guaranteed valuation in the "resource equalizer" option will also cause wealthier districts to start receiving state aid and thus weaken the equity effects of that option. A similar effect takes place in the Strayer-Haig portion if the foundation level is escalated to keep pace with inflation and the required or "charge back" tax rates are not proportionately increased. Given these considerations it is probably a better approach to place the "inflation correction"

into the system at the end of the calculations, that is, not to tie the inflation factor to any other parameter in the existing formula.

Considerable work must also go into selecting the most appropriate inflation factor. For example, it is not at all clear that the CPI (consumer price index) is the most appropriate means of adjusting the educational grant-in-aid formula. The cost of educational services may well move at a different rate than the general CPI. Preliminary work done on this question in Illinois suggests that the use of the CPI seriously underestimates the impact of inflation upon the cost of educational services in Illinois. (5) Nevertheless, the building of a separate cost-of-education index is a rather considerable task replete with difficult theoretical questions of separating the supply from the demand side of educational costs. (6) For that reason the simulations may have to be made with the CPI anyway. The adoption of a state-wide cost-of-living index is, fortunately, not quite so difficult a problem as is the adoption of regional cost-of-living indices. That latter type of study could use up all that is requested in this budget and considerably more besides.

Discussion of a cost-of-education index is apt to bring to the forefront the interesting question of expenditure increase controls for Illinois. Michigan and Illinois have been notable in escaping, at least up until now, the type of expenditure controls voted in a number of other states such as Kansas, Wisconsin, and California. The General Assembly might well wish, however, to impose these year-to-year increase limitations on the budgets of individual school districts as a price for building in a cost-of-education index for the entire state. In any event the effect of district expenditure

increase limitations needs exploration in Illinois. For example, both California and Colorado have procedures which allow low spending districts to increase their expenditures at a higher rate from one year to the next than their more affluent high spending neighbors. This is a direct and powerful approach to equity goals and deserves some separate simulation studies in Illinois. Doubtless these expenditure increase limitations would be extremely unpopular with teacher organizations and perhaps with some school boards as well.

Compared to an unpopular district increase limitation, a "cushioning factor" for enrollment decline would be quite popular. Roughly a dozen states have such an item in their grant-in-aid formulas. Often, however, this is nothing more than giving the district the option of counting the previous year or the current year pupil enrollment. In the case of Ohio and Colorado three-year averages can be used and in the case of Iowa different percentages are counted depending on the magnitude of the decline. The recent report of the Illinois Task Force on Declining Enrollment endorses the Ohio policy of a three-year moving average and also suggests allowing districts to count one-half of the claimable pupils lost from one year to the next for a specific time period. (7) The Illinois Bureau of the Budget has suggested other alternatives including counting $\frac{1}{4}$ of the first year loss, $\frac{1}{2}$ of the second, $\frac{3}{4}$ of the third, etc. The Bureau paper also suggests exploring a five-year moving average. (8) There are many simulation possibilities here and few seem to have been explored completely. There also exists the possibility of treating the loss of

certain types of pupils, such as Title I eligibles differently than "ordinary" pupils, or of treating the loss of pupils in affluent districts differently than the loss of pupils in poor districts. A current study underway in the Center should cast more light soon on exactly where and in what kind of district enrollment losses in Illinois are occurring. (9)

Enrollment losses not only affect state aid directly since all grants-in-aid in the United States are in either per pupil or per classroom unit terms, and therefore reduce state aid as pupils are lost; they also make districts appear wealthier in terms of property valuations per pupil and therefore reduce the number of districts qualifying for equalization aid. In the case of Illinois for example, there is a problem of the loss of pupils forcing districts up and over the guaranteed valuation figure in the "resource equalizer" option. This is probably an argument for setting parameters in the Illinois formula not in absolute dollar amounts, such as \$42,000, but in relative terms such as the 94th or some other percentile which will change as property valuations change. Legislation of this type has been introduced into the General Assembly but a detailed analysis was not performed to illustrate the effects of such a change.

A third needed simulation concerns the effects of reintroducing an incentive for reorganization and consolidation of school districts into larger units. The older Strayer-Haig option in Illinois does contain incentives both for reorganization of separate elementary and secondary districts into unit districts and also some incentives for larger size districts. However, the "resource equalizer" option which now covers more than 85% of the students of the state does not contain either reorganization or consolidation incentives.

There is a prima facie case for reorganization and consolidation in Illinois since the state continues to support more than 1,000 separate school districts, more than any other state in the Middlewest. One simulation possibility here is to adopt an old approach used many years ago in Wisconsin, e.g., providing a higher guaranteed valuation for districts above a state minimum size and a lower guaranteed valuation for districts below that size. Regretably all these reorganization and consolidation factors call for the determination of some "target" or "optimum" school district size and determining this particular size is a research problem of major proportions. (10) The opposite side of incentives for reorganization or consolidation would be the introduction of sparsity or small school allowances in the grant-in-aid formula. Unlike most western states and some midwestern states, Illinois has never attempted to make corrections for "necessarily existent" small schools. It is true, however, that there are still sparsely settled areas of Illinois even though the prairies of old are nowhere to be found in the 1970's. A very tightly controlled simulation of a sparsity factor might be a possibility, however, most observers would be inclined to approach such a notion with extreme caution given the possibility of setting into concrete some very inefficient small schools in the state.

The simulations above are general in nature, that is, they could apply to any state. There are also some matters dictated by peculiar developments in Illinois. While they have less generalizability they nevertheless need to be explored. For example, the state recently passed a law which will attempt to bring all school district property valuations to 33 1/3 percent of true market

value. Although the law appears to lack "teeth," if the districts all do approach a constant 33 1/3 percent instead of the present range of less than 18 percent to more than 40 percent, it will greatly change the rank order of districts in terms of wealth. This in turn will have an effect upon the distribution of state aid. Some districts heretofore considered poor, especially many in the southern part of the state, will find themselves somewhat better off and receiving less state aid while their local revenues will increase (assuming they do not lower their tax rates). Should these districts lower their tax rates they will receive even less state aid under the reward for effort aspects of the "resource equalizer" option. These property valuation adjustments also need simulation treatment. In this same category is the attempt to introduce the transportation tax rate into the rate that is now used for computational purposes in the general grant-in-aid formula. It is obvious that the introduction of the transportation rate would aid rural districts but the effect on the broader state fiscal policy goals has not been studied. Finally, the "phase-in" provisions in Illinois call for a double 25% factor, e.g., the district is expected to receive in one year 25% of what the calculation in the formula "entitles" a district to receive. There is also a second 25% limitation which prevents any district from receiving more than a 25% increase in state aid in any one year. There are several possible permutations and combinations here that could be explored.

All of the above-mentioned simulations call for keeping the major components of the present grant-in-aid formula in Illinois while making changes in the parameters of the equation. There is also a class of proposed changes

that would alter more drastically the basic value assumptions of the present grant-in-aid law. For example, the system now in use in this state is a linear DPE model. That is, reward for increasing the local tax rate is constant throughout the entire range of the tax schedule to maximum values of \$3.00 for unit districts, \$1.95 for elementary districts, and \$1.05 for high school districts (dollars per hundred dollar valuation in Illinois). In a previous Center publication the possibility of a nonlinear DPE system for Illinois was described, that is, the reward could be at a higher rate for a part of the tax schedule and a lower rate for another part of that schedule.(11) It might also be possible to change the rate of reward for elementary and high schools but not units, or vice versa. If units were given more reward than duals, this would be one method of encouraging consolidation, a consideration mentioned earlier. While various suggestions for curvilinearity have been put forward, none have been given a full simulation treatment.

Interest in introducing an income factor into the Illinois grant-in-aid formula remains high among certain legislators, and there have been some attempts to simulate the aid distribution that would result from introducing a Rhode Island type income factor into the Illinois formula.(12) There are, however, many different ways to introduce an income factor into the formula and only a few of these have yet been explored. Also different income factors produce different results. For example, income per ADA, income per TWADA (Title I weighted average daily attendance), income per capita, and median family income all produce different distributions of state funds in Illinois.

It is of course already known that the introduction of most income factors is beneficial to the more rural parts of Illinois and also that the addition of an income factor would be more helpful to the southern part of the state than the central or northern part of the state. (13) However, much more could be done on this topic. In fact, virtually the entire budget requested in this proposal could be used on this single topic if there were sufficient interest in the General Assembly. There is one major limitation. The only income data currently available in Illinois comes from the 1970 federal census of population and housing. The failure of Illinois to collect district income data from the state income tax return places some severe limitations on income studies in this state.

Finally, there are those proposals put forward by legislators to abolish entirely the "reward for effort" provisions which are currently in the Illinois system. The state would then return to the notions which, for so many years, lay at the base of the "foundation" system. It cannot be denied that there are several good arguments against the values and assumptions on which the "resource equalizer" rests. In fact, some of those who had a hand in passing the 1973 reform have outlined a number of these arguments elsewhere. (14) Probably the argument that has the most credibility with some Illinois legislators is the same argument that led to Florida repealing a "reward for effort" system after a very brief experimental period, that is, that the system encourages districts to raise their property tax rates and thus, in the longer run, does not act to relieve local property tax burdens. Much of this controversy

turns on a time framework. In the short run there probably is local property tax relief since the district that taxes more receives more state aid; however, it is also true that the districts as a whole receive more funds from the state by voting higher property taxes on themselves. DPE systems of all types are truly "local incentive" grants-in-aid and these types of grants-in-aid have had their defenders and their attackers for a very long time indeed. (15)

If Illinois does decide to drop out of the group of DPE states mentioned earlier in this proposal, then there are several ways of making this 180-degree turn. One method of so doing would be to change the law so that all districts are "assumed" to be taxing at the maximum tax rates allowed, e. g., the \$3.00, \$1.95, and \$1.05. Some simulations have been done on this and the estimate of state costs runs to 300 million new state dollars. (16) In the present tight money situation that is probably enough not to make this a likely piece of legislation. There are also some interesting policy questions involved in doing away with the present reward for effort in Illinois. For example, it can be argued that if the reward for effort provision is removed, there is little reason for keeping the "resource equalizer" portion of the present law. Virtually an identical distribution of state monies could be obtained by setting a \$1,260 foundation level and selecting some appropriate mandated tax rates in the old Strayer-Haig formula. In other words, it would be cleaner in theory and much easier to explain to the taxpayer to simply go back to the old "foundation" system. One might carry back the Title I weighted students

into the old formula and also retain the flat grants. Selecting a mandated tax rate high enough to give the same distribution as the present "resource equalizer" might, however, prove to be a problem. Unless of course the DPE system is allowed a respectable testing period, the legislature could also be accused of being arbitrary and capricious in not rewarding local effort, then rewarding it, and then not rewarding it again. It would also leave local planning in a shambles. Again, if such a fundamental revision is contemplated, then virtually the whole grant could be used in studying the effects of this about face.

To do all these simulations would require a budget much larger than we have requested. We do reiterate that we will be selecting from the above simulations based on the legislative input from the Illinois School Problems Commission and the other legislative contacts the Center maintains. In this manner we will be concentrating the resources of the Center on those changes that have the greatest possibility of enactment in Illinois in the near future. Fortunately, we can also rely on the Illinois Office of Education to do some of this work and also on the Governor's Bureau of the Budget. The good working relations the Center has with these agencies can be relied upon to prevent any unnecessary duplication of efforts. In addition to the need of the legislature to not be completely dependent upon the executive, which we have mentioned earlier, we would also like to point out that keeping the universities in the business of helping to analyze public policy questions is not such a bad idea either. We tend to forget that this is a phenomena not found in other parts

of the world. In many countries the central ministries would do all the research on grants-in-aid. We tend to think that independent analysis done in the universities in the United States adds a measure of objectivity to public policy that is missing elsewhere. If research of this nature is not supported, however, it will likely disappear. The Board of Higher Education in Illinois has repeatedly expressed the view that the general revenue funds in Illinois universities should be used only as "seed money" and that any long term research commitments must be supported by funds raised outside the university. (17) While this policy is disputed, it does not bode well for school finance research in Illinois universities.

III. Current Resources of the Center

The personnel of the Center currently consist of three professors in the Department of Educational Administration, two of whom have assigned time for educational financial research. There is also currently a supporting staff of one post-doctoral graduate student and two pre-doctoral graduate students. The Center has good access to colleagues in the departments of Economics, Sociology, and Political Science, and also in the various branches of applied statistics. The Center also has access to the University computer center, the university postal system, the printing services, telecommunications, etc. However, in recent years most of these university services have been placed on a "charge back" system so that the Center must now pay for any of these services utilized in its research. A brief background on ~~each~~ ^{five of the} ~~of the six~~ people currently involved in Center activities follows.

G. Alan Hickrod, Director

Professor Hickrod has been active in school finance research for ~~fifteen~~^{eighteen} years. He is the author of approximately fifty publications in the area of K-12 finance including articles appearing in the American Educational Research Journal, the Review of Educational Research, Educational Administration Quarterly, Education and Urban Society, Journal of Educational Administration, Planning and Changing and the Journal of Education Finance. Professor Hickrod presently serves on the board of directors of the American Educational Finance Association and the editorial boards of the Journal of Education Finance and Planning and Changing. In 1967 Dr. Hickrod received one of the national awards for school finance research given at that time by the National Education Association and has since served as a judge for the panel that awards these same honors for the American Educational Finance Association. In 1972 and 1973 Dr. Hickrod was chairman of the Superintendent's Advisory Committee on School Finance in Illinois and a member of the Governor's Special Commission on the Schools. Dr. Hickrod is a member of the Research and Evaluation Advisory Council of the Illinois Office of Education and a Senior Consultant to the State Superintendent. In the last few years Professor Hickrod has served as consultant to the Education Commission of the States, the National Conference of State Legislatures, the United States Office of Education, and the states of Missouri, Colorado, Ohio and Texas on various school finance matters. He is a graduate of Harvard University and a member of Phi Beta Kappa and Phi Delta Kappa.

He is also consultant to the Citizens Commission on School Finance and Chairman of the IDE Technical Task Force in School Finance

Dr. Ben C. Hubbard - Co-Director

Professor Hubbard has been active in research and practice in the field of school finance, policies and administration since the early 1950's. As a Superintendent he served on the Alabama Education Commission, a state wide study, directed by Dr. R. L. Johns and Dr. Edgar L. Morphet and has been involved in School Time studies to bring about political change and to perform research since that time. He, has, for instance, served as the Research Director for the Illinois School Problems Commission from 1964 to the present; as a member of both the Governor's task force on Education and the Superintendents Advisory Committee from 1971 to 1973 in Illinois; a member of the Declining Enrollment task force in Illinois in 1975; been active in all aspects of school legislation in Illinois for the past 12 years with a major responsibility for adopting such bills as the new State Board Bill plus practically all changes in the state aid formula from 1965 to the present.

In addition to his involvement with practical application of all types of legislation and assisting in its passage, he has been active in writing. He has published two books relating to school law and finances in Illinois; written more than 20 articles for publication in state and national journals; served on more than 25 surveys of school districts; published more than a dozen pamphlets and booklets on subjects ranging from the study of Urban Education to a booklet on Local, State and Federal relations. Much of his research and writing has been about specific problems, particularly as they relate to financing the schools for legislative committees and commissions.

*Like professor Hubbard he is also
consultant to the Citizens Commission on School Finance
and is a member of the TOE Technical Task Force on School Finance*

He is Co-director of the Center for the Study of Educational Finance and has assisted in their studies and publication. In addition to these facts, Professor Hubbard holds the rank of "University Professor", the first person in the field of education ever to hold this rank at Illinois State University.

Dr Creta D. Sabine, Research Associate

Dr. Sabine has been in school business management for approximately forty years. In addition to service at the local school district level, she was Director of Federal Programs, Assistant Superintendent for Research, and Assistant Superintendent for Research and Business Services for the State of Arizona. In recent years she has been Director of the Planning Programming Evaluation and Budgeting System Project of the Association of School Business Officials. She has also served as Director of national and regional seminars on food service management for the Association of School Business Officials. Before coming to Illinois State University, she was affiliated with the Department of Educational Administration at Arizona State University. She is the author of numerous manuals and other action research publications intended for school business managers.

Dr. Thomas W. C. Yang, Post-Doctoral Research Assistant

Dr. Yang has been the principal research assistant on a number of recent research efforts of the Center and is co-author with professors Hickrod and Hubbard of the publications which report these research activities. His dissertation entitled "Measurement of School Revenue Equity in the States of Illinois, Michigan and Kansas" has recently been released to a select number of individuals who have cooperated in the research activities of the Center at ISU. Dr. Yang has a Master's degree in business administration and additional work in statistics, econometrics, and economics.

Max Pierson, Pre-Doctoral Research Assistant

Mr. Pierson currently acts as an administrative assistant handling the day-by-day details of the Center, including dissemination of the publications of the Center. Mr. Pierson is also engaged in an important study of the effects of removing the corporate personal property tax in Illinois, an action mandated by the new Illinois constitution. Mr. Pierson has practical field experience in school finance and in addition is gaining considerable expertise on the revenue aspects of school finance. Like Mr. Chaudhari, he is in the final stages of his doctoral program.

Dr. Yang is also a consultant to the Illinois Office of Educational and has recently completed a research project for that agency in school finance.

Ramesh Chaudhari, Pre-Doctoral Research Assistant

Mr. Chaudhari has also been a key research assistant on a number of recent research efforts of the Center and is also co-author with professors Hickrod and Hubbard of the publications which report these research activities.

Mr. Chaudhari is a Scientific Programmer with the Illinois State University Computer Services and has his Master's degree in Computer Science.

Mr. Chaudhari was especially instrumental in the development of the Gini Index as a tool for analyzing the fiscal neutrality situation of states relative to their school finance structure. Mr. Chaudhari has served as a consultant to the National Conference of State Legislatures and ^{has served} ~~is currently serving~~ an internship with the Illinois Bureau of the Budget. Mr. Chaudhari has served as the computer programmer on a great number of doctoral dissertations in school finance and is himself in the final stages of his own doctoral program.

Together with Dr. Yang, Mr. Chaudhari recently completed a research project in School Finance for the Illinois Office of Education.

IV. Budget Justifications and Timing of the Project

The lion's share of the attached budget is taken up by two items: (a) the salary of a full time research associate in the Center, and (b) computer costs including programming costs. Some explanation of these items is obviously in order. The full time research associate, designated the "principal investigator" is necessary since neither the Director's position nor the position of Co-Director of the Center are considered full time research positions. Both individuals are expected to teach classes for the Department of Educational Administration, advise students, and carry out various and sundry professorial duties. A project of this magnitude, however, merits a full time individual to carry out the day-by-day data gathering and analysis duties. Under the supervision of the Director and Co-Director, these duties can be delegated to a recent graduate of the doctoral program, in this case, Dr. Thomas W. C. Yang. In addition there are extensive programming duties connected with these computer simulation studies. It is useful, therefore, to put a professional computer programmer on retainer, in this case, Mr. Ramesh Chaudhari. Both Dr. Yang and Mr. Chaudhari are experienced with school finance research and have cooperated in many of the activities of the Center. The Department of Educational Administration will assign a less experienced graduate student to this project during the regular academic year, but funds are needed for a regular graduate assistant during the summer months. The funds indicated in the budget for the project director will also be used only during the summer months.

The present research activities of Center personnel will absorb available resources until the end of this academic semester. We are, therefore, suggesting that the project run from May 15th of 1976 to January 15th of 1977. These dates are, however, negotiable, as are details in the attached tentative budget.

Tentative Budget
May 15, 1976 - January 15, 1977

Personnel:	<u>Center*</u>	<u>ISPC</u>	<u>NCSL</u>
Dr. G. Alan Hickrod, Director of Project and Director of the Center	(2525)	1262	1262
Dr. Ben C. Hubbard Co-Director of Project and Co-Director of the Center	(2525)		
Dr. Thomas W. C. Yang Principal Investigator of the Project	-	4400	4400
Mr. Ramesh Chaudhari Computer Programming Consultant	-	838	1062
Mr. Max Pierson Graduate Asst. (summer)	-	-	640
Grad. Asst. (first sem.)	(1280)	-	-
Computer Costs: Machine Time, tape rental, card punching, etc.	-	2140	2860
Printing of Final Report	-	360	-
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Totals by Contributing Units	(6330)	9000	10224
		Grand Total =	\$25,554

* Contributions of the Center are in-kind, those of the Illinois School Problems Commission and the National Conference of State Legislatures are in cash.

Notes and References

1. See for example: Hickrod, G. Alan; Hubbard, Ben C.; and Yang, Thomas W. C.; The 1973 Reform of the Illinois General Purpose Educational Grant-In-Aid: A Description and an Evaluation, available from the Center for the Study of Educational Finance, Illinois State University, Normal, Illinois at a cost of \$2.50; also available in Selected Papers in School Finance, 1974, U. S. Office of Education, Washington, D. C. See also Garber, Lee O. and Hubbard, Ben C., Law, Finance, and the Teacher in Illinois, 1974, Interstate Printers and Publishers, Danville, Illinois. For earlier materials on grant-in-aid alternatives in Illinois see Hubbard, Ben C. and Hickrod, G. Alan, "Alternatives in Educational Expenditure Policy for the State of Illinois", Report of the School Problems Commission, No. 10, 1969, the Commission, Springfield, Illinois. All subsequent reports of the School Problems Commission also contain materials on Illinois grant-in-aid systems. See also Final Report of the Superintendent's Advisory Committee on School Finance, 1973, Illinois Office of Education, available now as document #ED 078 550 in the ERIC document reproduction service; Hubbard, Ben C. and Hickrod, G. Alan, "Equalizing Educational Opportunity by Means of a Resource Equalizer or Guaranteed Valuation Grants-in-Aid", in Superintendent's Advisory Committee on School Finance, Occasional Papers, volume #2, 1972, available now as document #ED 078 552 in the ERIC document reproduction service; also A New Design: Financing of Effective Education in Illinois, 1972, Bureau of the Budget, Executive Office of the Governor, Springfield, Illinois.
2. See for example the classification of states in Harris, Marshall A., School Finance at a Glance, Education Commission of the States, forthcoming.
3. See Hickrod, G. Alan; Yang, Thomas W. C.; Hubbard, Ben C. and Chaudhari, Ramesh, "Measurable Objectives for School Finance Reform", a paper presented to the American Educational Research Association Annual Meeting, 1975, available now as document # ED 103 977 in the ERIC document reproduction service; for an earlier treatment see Hickrod, G. Alan; Chaudhari, Ramesh; and Tchong, Tse-Hao, "Definition, Measurement, and Application of the Concept of Equalization in School Finance", in Superintendent's Advisory Committee on School Finance, Occasional Papers, volume #1, 1972, available now as document #ED 078 551 in the ERIC document reproduction service.
4. Yang, Thomas W. C., "Measurement of School Revenue Equity in the States of Illinois, Michigan and Kansas", unpublished doctoral dissertation, Illinois State University, 1975.

5. Walzer, Norman and Domritz, Joseph, "The Rising Costs of Educational Inputs", in Superintendent's Advisory Committee on School Finance, Occasional Papers, volume #2 supra.
6. Grubb, W. Norton, "Cost of Education Indices: Issues and Methods", Handbook, forthcoming publication of the National Conference of State Legislatures.
7. Brown, Howard, et. al. , Report of the Illinois Task Force on Declining Enrollments in the Public Schools, 1975, Illinois Office of Education, Springfield, Illinois.
8. Skloot, Floyd, "School District Problems with the Current Illinois Formula", January, 1976, internal memo of the Bureau of the Budget, Springfield, Illinois.
9. "Aspects of Declining Enrollment in Illinois", a study supported by the Division of State Assistance, United States Office of Education.
10. There is a very large body of literature on this subject. For a start see: Cohn, Elchanan, "A Proposal for School Size Incentives in State Aid to Education", Journal of Education Finance, Fall, 1975; also Cohn, Elchanan, Economics of State Aid to Education, 1974, D. C. Heath and Company; for studies using Illinois data see: Hickrod, G. Alan, Chaudhari, Ramesh B., Yang, Thomas W. C. and Hubbard, Ben C., "Cost-Size Relationship Among School Districts in Illinois, 1974", Center for the Study of Educational Finance, Illinois State University; for earlier materials: Sabulao, Cesar M. and Hickrod, G. Alan, "Optimum Size of School Districts Relative to Selected Costs", Journal of Educational Administration, October, 1971.
11. Hickrod, G. Alan and Hubbard, Ben C., "Research Agenda for School Finance Reform in Illinois", Research Report 1-HH-75, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois.
12. Hou, Daniel J. N., "Effects of Selected Variables on the Distribution of Illinois State Aid to Education", unpublished doctoral dissertation, Illinois State University, 1975.
13. Hickrod, Hubbard and Yang, The 1973 Reform, op. cit.
14. Ibid.

15. For two quite different views on "local incentive" by a respected authority on school finance in the United States compare: (a) Johns, R. L., "Incentive Grant for Quality Education", Florida Educational Research and Development Council, 1966 (now available as ED 010 906) with pages 262-265, Johns, R. L., and Morphet, Edgar L., The Economics and Financing of Education, Third Edition, 1975, Prentice-Hall; for other commentary see: Phi Delta Kappa Commission on Alternative Designs for Funding Education, Financing the Public Schools, 1973, PDK, Bloomington, Indiana; see also Jordan, K. Forbis and Alexander, Kern, "Constitutional Methods of Financing Public Schools", in Alexander, Kern and Jordan, Forbis (ed.), Constitutional Reform of School Finance, 1972, Institute for Educational Finance, University of Florida, Gainesville, Florida.
16. Skloot, op. cit.
17. Board of Higher Education, "A Master Plan For Post Secondary Education in Illinois: Second Draft", to Board, December, 1975, Springfield, Illinois.