

A THREE-DIMENSIONAL PROGRAM ACCOUNT CLASSIFICATION SYSTEM FOR PUBLIC SCHOOLS*

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by Erick L. Lindman

Recent interest in program budgeting presents an opportunity to improve the public school accounting system which has evolved since the turn of the century. The system was established when public schools offered for all students a single program with few, if any, auxiliary services. Since then, school programs have become complex and varied, and the single-dimensional accounting system, even with its amendments and additions, is hopelessly inadequate. Its inadequacy is especially noticeable when school administrators attempt to apply the concepts of program planning and budgeting to school systems.

Indeed, the key step to effective program budgeting is the development of a program-oriented expenditure classification system for public schools. To do this, there must first be sufficient consensus concerning the proposed "programs," so that the U. S. Office of Education can establish account classifications for them in its accounting guide for public schools.

This paper reviews briefly some of the weaknesses in the present system and suggests a three-dimensional expenditure classification system to replace it.

The Present System

The minimum function-object account classification system recommended by the U.S. Office of Education for public schools includes the following major categories:

1. Administration
2. Instruction
3. Attendance and Health Services
4. Pupil Transportation
5. Operation of Plant
6. Maintenance of Plant
7. Fixed Charges
8. Food Services
9. Community Services
10. Capital Outlay
11. Debt Services
12. Transfer Accounts

This list contains many inconsistencies that tend to obscure essential information about public school expenditures. The list is intended to be a "function-object" breakdown of school expenditures. Although one can accept as "functions" such items as "administration," "instruction," "operation of plant," "maintenance of plant," etc., the item called "community services" is a different kind of item. It is neither a function nor an object. Instead, it identifies a clientele other than school children and describes a type of service. Moreover, expenditures in this item could be classified quite properly under the other function-object categories such as "administration," "operation of plant," etc.

This dimension indicates different amounts spent for the functions and objects in the school budget. Not only does this cost breakdown preserve historical continuity, but it also provides analytical information concerning each program identified in the type-of-school dimension. The function-object account classification becomes more meaningful when combined with the other two dimensions.

The major subcategories listed in this dimension follow current practice rather closely. Probably some changes in the subcategories under instruction are needed. Pupil guidance and library services need to be identified along with expenditures for educational TV and computer-assisted instruction. These subcategories should be included under the broad category of instruction.

The Scope-of-Service Dimension

Public school revenues come from the state and the Federal government as well as from local tax sources. In this respect program planning and budgeting for public schools differ fundamentally from Federal departments. Moreover, the actual amounts contributed by the state and by the Federal government are affected by the types of "programs" maintained by the school district. For this reason, techniques used in Federal departments are not directly applicable to public schools. Effective program planning and budgeting for public schools must be based upon adequate analyses of potential income from state and federal sources restricted to specific programs.

In addition to describing the scope of service offered, this dimension is intended to clarify for purpose of local school program planning the effects of categorical aids from state and Federal sources, and, of equal importance, to provide essential information for state legislators and United States Congressmen, so that they may see more clearly the effects of their appropriations upon local school operations.

The proposed scope-of-service account classification system includes the following major categories:

1. The Basic Program
2. Vocational Education
3. Special Education
4. Compensatory Education
5. Health Services
6. Pupil Transportation
7. Lunch Program
8. Other Supplementary Programs

Most of these programs are related to sources of income. The basic program in most states is related to income to support the foundation program. One of the purposes of the scope-of-service dimension is to clarify this relationship. Hopefully, segregation of expenditures for the basic program will clarify for legislators amounts needed for the jointly financed public school foundation program. For local boards of education this account classification would show the amount and purpose of local funds contributed to supplement the state foundation program.

In order to equalize school tax burdens, states generally provide categorical aid for pupil transportation. For this reason, pupil transportation is included in the scope-of-service dimension. It is the only item which occurs in the same form in two different dimensions. Both the local board of education and the state legislature need to know how much is spent for pupil transportation and how much the state is contributing for this purpose.

Similarly, the school lunch program is included in the income-related dimension to show its total cost and sources of income. Under present accounting procedures, recommended by the U. S. Office of Education, accurate information concerning total amounts expended for lunches is not recorded in school fiscal reports. The present practice of including among the function-object items an amount for school lunches that is not the total cost but the amount contributed from tax sources is unnecessarily confusing.

Finally, an item for other programs is provided. In California and in a number of states, this item would include driver education. Developmental programs such as those provided for in Title III of the Elementary and Secondary Education Act of 1965 and in the National Defense Education Act would also be included in this category. While these programs usually involve relatively small sums of money, they attract attention because they are "innovative" and are often Federally supported. Although grants for this purpose may be discontinued in the near future, efforts to find new ways to educate children in schools are expected to continue.

funds are actually used and how the fiscal condition of the school district would be affected by eliminating or reducing any of the "aided" programs.

Moreover, the format of Table III, using statewide totals, provides essential information for the state legislature and Congress. In this table the relationship between amounts appropriated to aid special programs is related directly to the cost of these programs.

Table IV, the fiscal summary, is included to emphasize that outgoing transfers, debt service expenditures, and operating resources would not be classified by the three-dimensional system. They would be used to show the condition of the general fund and would be reported both in the budget and in the annual report as single, unclassified items. Only the "Program Expenditures" would be classified according to the suggested three-dimensional system.

These tables indicate the types of analyses that can be made using a three-dimensional approach to the classification of public school expenditures if one of the dimensions is based on programs identified and aided by state legislatures and Congress. However, only those aided programs that are substantial and continuing have been identified. Small and temporary programs have been combined into a single "Other Programs" category.

The items suggested for the three dimensions represent broad categories, and they will need to be subdivided to give additional information. For example, using these subdivisions, it should be possible to segregate general fund expenditures for

capital outlays and equipment replacement. Possibly a category for contracted services is needed. Expenditures for teachers' salaries could be classified according to teaching assignment.

This approach to program accounting assumes that some categorical aids will continue and perhaps expand, and that public school program budgeting will be concerned increasingly with income-related programs. Hopefully, if the number of such programs established in the accounting system is limited, their excessive proliferation can be avoided.

I. ELEMENTARY SCHOOL EXPENDITURES BY PROGRAM 1968-69

Objects Purchased	Basic Prog.	Voc. Educ.	Spec. Educ.	Comp. Educ.	Health Service	Pupil Trans.	Lunch Prog.	Total
<u>Instruction</u>								
1. Prin. & Sup. Salaries								
2. Classroom Teachers' Salaries								
3. Other Professional Salaries								
4. Clerical & Paraprof. Salaries								
5. Books								
6. Instructional Supplies								
7. Instructional Equipment								
8. Other Costs of Instr.								
Total for Instruction --								
<u>Support Services</u>								
1. Administration								
2. Operation of Plant								
3. Maintenance of Plant								
4. Pupil Transportation								
5. Oth. Support. Services								
6. Fixed Charges								
Total Support Ser.--								
Grand Total -----								

DIMENSIONS OF THE SCHOOL BUDGET

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DIMENSIONS OF THE SCHOOL BUDGET

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During recent years, we have heard much about program budgeting as a means of presenting information to decision-making bodies which is more relevant to the choices they must make. These efforts are especially timely in the field of education, for though some may believe that educational values and dollar values are difficult to compare, the comparison of these two types of values is the very essence of school budget-making. Time and again, the school board must compare the educational values of several different ways of spending specific amounts of money and answer the following types of questions: Will the greatest educational value be obtained by: adding to the elementary school libraries? buying more language laboratories? employing additional remedial teachers? creating more special programs for the gifted? "busing" pupils to more remote schools?

Difficult as these choices may be, the problem becomes even more complex when the tax rate dimension is added. Should taxpayers, for instance, be asked to contribute more so that one or two of these additional educational services can be provided for children and youth in the community? And, of course, this question calls for a comparison of the value of an educational service on the one hand, and the financial sacrifice of taxpayers on the other.

Still another dimension of complexity is added to the problem when specially earmarked state or Federal aids are available to support special aspects of the instructional program. For example, during recent years, foreign language laboratories have been available to local school districts at half price because Uncle Sam paid the other half of the cost under the National Defense Education Act. Budgetary choices, therefore, are affected by the bargain counter effect of partially reimbursed school programs.

Although the process of comparing dollar values and educational values cannot be simplified, it can be clarified to a much greater extent through the introduction and implementation of more efficient accounting procedures which show more clearly the effect of earmarked income upon budgetary choices and the net cost of partially reimbursed educational programs.

In a very real sense, the school board at budget-making time is preparing a shopping list of educational services to be purchased for the students during the ensuing school year. Unfortunately, the shopping list is couched in technical accounting language, developed and standardized over the past half century, providing legislative bodies and taxpayers with only a vague idea about the school program for the next year. The official shopping list, the budget, includes such formidable items as: fixed charges, certificated salaries of administration, textbooks, other expense of instruction, debt service, out-going transfers, etc.

This is the official shopping list prescribed for public schools. It has some good points. It is comparable to the school

expenditure classification used in other states and it is therefore possible to determine quite readily if the percent of the total school budget or amount per pupil allocated for any of these items is more or less than the amount so allocated in other school systems.

It is undeniable that this information is useful. However, it does not go far enough. Parents and other citizens generally want to know what is new or better about the school program next year. Moreover, the school board, in attempting to carry out any kind of cost effectiveness study, finds this kind of breakdown of a budget inadequate. Our budget instrument may have been adequate for the simple school program of 50 years ago; today, by contrast, it is hardly adequate to describe the complex school program. In short, it reveals little about the quality or variety of educational services to be provided during the coming year.

Moreover, state legislatures and the United States Congress need information to evaluate the effectiveness of various grant-in-aid programs. In this respect, program accounting for public schools differs fundamentally from program planning and budgeting systems applicable to Federal departments. The inter-governmental aspect of public school finance as well as the inherent difficulty of evaluating educational "output" make the public school problem uniquely difficult.

To avoid confusion in approaching this problem, it is necessary to distinguish clearly between three closely related activities involving the analysis of school costs.

First, there is the annual planning and evaluation procedure. In order to provide the local board of education with evidence rel-

ative to program choices and to clarify budgetary options, better procedures are needed to relate program effectiveness to program costs. In most cases, this can be achieved by developing a responsibility-oriented planning procedure in which identifiable programs are assigned to specific members of the administrative staff so that a single individual is responsible for preparing cost estimates and presenting evidence relating to the effectiveness of each program. Such a responsibility-oriented planning procedure can be tailored to fit local conditions and needs. There is no need for uniformity of procedures among different school districts.

The second cost analysis activity, standardized program accounting, has a different purpose from the local program planning and review procedure. While the assignment of responsibilities for program planning and evaluation purposes among selected members of the administrative staff should reflect local conditions and special talents of individuals, standardized accounting procedures are intended to produce uniformity among school systems. Such uniformity of accounting procedures is needed to facilitate comparison of the costs of school programs in different cities and to provide valid information concerning their costs for state legislatures and for the United States Congress.

Much work has been done to standardize the present "functional" account classifications used in public schools. In addition, classification of expenditures by school level, such as elementary schools or high schools, is standardized throughout the Nation.

But classification of school expenditures for such programs as special education, compensatory education, or vocational educa-

tion have not been standardized, yet, perhaps ironically, these are the very programs for which state legislatures and the United States Congress have appropriated categorical aid funds and for which valid cost information is needed by the legislature and the Congress. For this reason, a next step in improving school accounting and budgeting procedures should be to develop standardized program accounting in order to identify the cost of such aided programs uniformly throughout the Nation.

A third type of study involving the analysis of school costs relates to long-term planning. Occasionally, special studies are needed to provide evidence to help the school board make decisions about long-term plans. Frequently, these studies are elaborate and expensive and should not be part of the annual budget procedure. They should, instead, be made occasionally as needed. In this category studies of the cost per pupil of teaching of various school subjects should be included.

It is apparent that of the three aspects of public school cost analysis, the development of standardized program accounting requires common agreement among local school districts and among the 50 states. For this purpose, it is useful to identify the various kinds of dimensions that can be used to classify school expenditures. The following list of six dimensions indicates the variety of ways in which school expenditures can be classified:

1. Type of School Classification (first dimension) -

refers to the classification of public school expenditures into such categories as: elementary schools, secondary

schools, summer schools, adult or evening schools, etc.

2. Functional Classification (second dimension) -
refers to the standard classification of public school expenditures into such categories as: administration, instruction, plant operation, etc.
3. Restricted Income Classification (third dimension) -
refers to the classification of public school expenditures into categories for which earmarked or restricted income is available, such as: vocational education, compensatory education, special education, etc.
4. Curriculum Classification (fourth dimension) -
refers to classification of public school expenditures into such categories as: arithmetic, foreign language, geography, etc.
5. Instructional Method Classification (fifth dimension) -
refers to the classification of public school expenditures into such categories as: libraries, instructional television, etc.
6. Social Purpose Classification (sixth dimension) -
refers to the classification of school expenditures into such categories as the development of: worthy home membership, ethical character, vocational competence, appreciation of the arts, civic responsibility, etc.

Of course, it will be noted that the first and second of these dimensions are in current use and have been standardized. The question which must be answered now is: which of the other dimensions, if any, are of sufficient importance to be standardized and used uniformly by all school systems throughout the United States? Of the various possibilities, the third dimension seems to be most in need of standardization in order to supply information for state legislatures and the United States Congress about the categorical aid programs in which they are interested. Since this information is needed annually and since it will be used to compare program costs in different school systems, a standard classification system is needed.

The other dimensions--the curriculum classification, the instructional method classification and the social purpose classification--probably do not require such standardization at this time...indeed, the use of these classifications is likely to be infrequent for long-term planning purposes and should not become an integral part of the annual budgeting procedure. The third dimension, however, the one related to major categorical aid programs, must be standardized in the near future in order to improve the communication between local school systems, state legislatures, and the Federal Government so that appropriations for public schools will be based upon the best possible information concerning the effectiveness of grant-in-aid programs.