DOCUMENT RESUME

ED 054 517 EA 003 597

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TITLE Program Budgeting as a Way To Focus on Objectives in Education.

PUB DATE Sep 69

NOTE 18p.

EDRS PRICE MF-$0.65 HC-$3.29

DESCRIPTORS Budgeting; Decision Making; *Educational Objectives; *Management Systems; *Objectives; *Program Budgeting; Public Relations; Resource Allocations; *School Community Relationship; School Districts; Social Values; Values

ABSTRACT

This document discusses the role of educational objectives in the construction of a program budget. Special emphasis is given to the necessity of specifying primary objectives--those that support basic values and fulfill community needs. Because primary objectives are at the top of the educational objectives hierarchy and provide the format for the program budget, they are important to an understanding of what a school district is trying to accomplish. Special problems discussed in the study include conflicting, competing, and interdependent objectives. (RA)

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# PROGRAM BUDGETING AS A WAY TO FOCUS ON OBJECTIVES IN EDUCATION

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September 1969



P-4162

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## INTRODUCTION

The purpose of this paper is to describe how program budgeting can encourage decisionmakers in the school district to focus on the objectives of the public schools and thereby provide an impetus for the clarification and rethinking of those objectives. The intent is *not* to promote a specific set of objectives. That would require a careful examination of what the schools should be doing to prepare the students of today for the technological, social, economic, and cultural worlds of tomorrow. Such an examination has not been carried out here.

The public schools and school districts fill several different kinds of needs in their communities, needs that derive from the values of the society. One of the basic values toward which contemporary public education is directed is to assist the individual in developing his capacities to their fullest potentials. This seems to be a different objective from that of the founding fathers of American public education, who saw the development of an informed and responsible citizenry as the main justification for the public schools. But one could say that each of these purposes subsumes the other and that the difference is in emphasis more than it is in content. The change has come about, I think, because the public schools have expanded their activities to encompass more than the original purposes seen for them.

Rather than discuss the difficult problems associated with basic values, however, let us back off a step to consider what I shall term *primary objectives*--objectives that are presumed to support basic values.

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This material was prepared pursuant to a grant from the U.S. Office of Education, Department of Health, Education, and Welfare.

THE NEED FOR STATING PRIMARY OBJECTIVES

The statement of primary objectives will form the basis of the program budget. For two reasons these objectives should be expressed in terms of the community needs that the school district is filling. First, the program budget should provide a means for telling the layman what the schools are trying to do, so the statement of objectives should have meaning to concerned citizens, especially those outside of the educational community who are responsible for decisions that affect schools. The traditional budget, oriented toward the operation of the school system, uses functional categories to describe that operation, such as *instruction* and *administration*. These are intrainstitutional concerns, and these categories ignore the extrainstitutional goals of the schools. Thus, even if better communication with the general public were the *only* reason for undertaking program budgeting, a restructuring of the traditional budget would be required.*

The identification of primary objectives plays a role more valuable than that of public relations, however. It also provides goals to which all decisions about the operation of the schools can ultimately be referred. These goals are, in fact, at the top of a hierarchy of objectives, each successive level of which is more specific and further removed from large, ultimate goals. To illustrate, there might be a hierarchy under the primary objective *to develop good citizens*, as shown on Fig. 1. At the bottom of the hierarchy might be *behavioral objectives*, devised for the design and evaluation of instruction. Behavioral objectives are too detailed to provide the structure for a program budget, whereas ultimate objectives (level I) are too

*This also argues that the major categorization should not be by organizational units such as elementary schools, junior highs, the central district administration, and so on. Because, if the categories are supposed to represent the objectives of the school district, this would imply that the chief concern of the public schools is simply to process students through the several levels of education. But responsible citizens, as well as educators, consider the schools to be more than custodial institutions that confer a stamp of approval on every student who succeeds in serving his time. They, too, are concerned with the quality of their children's education as expressed in their children's success in school and in later life.

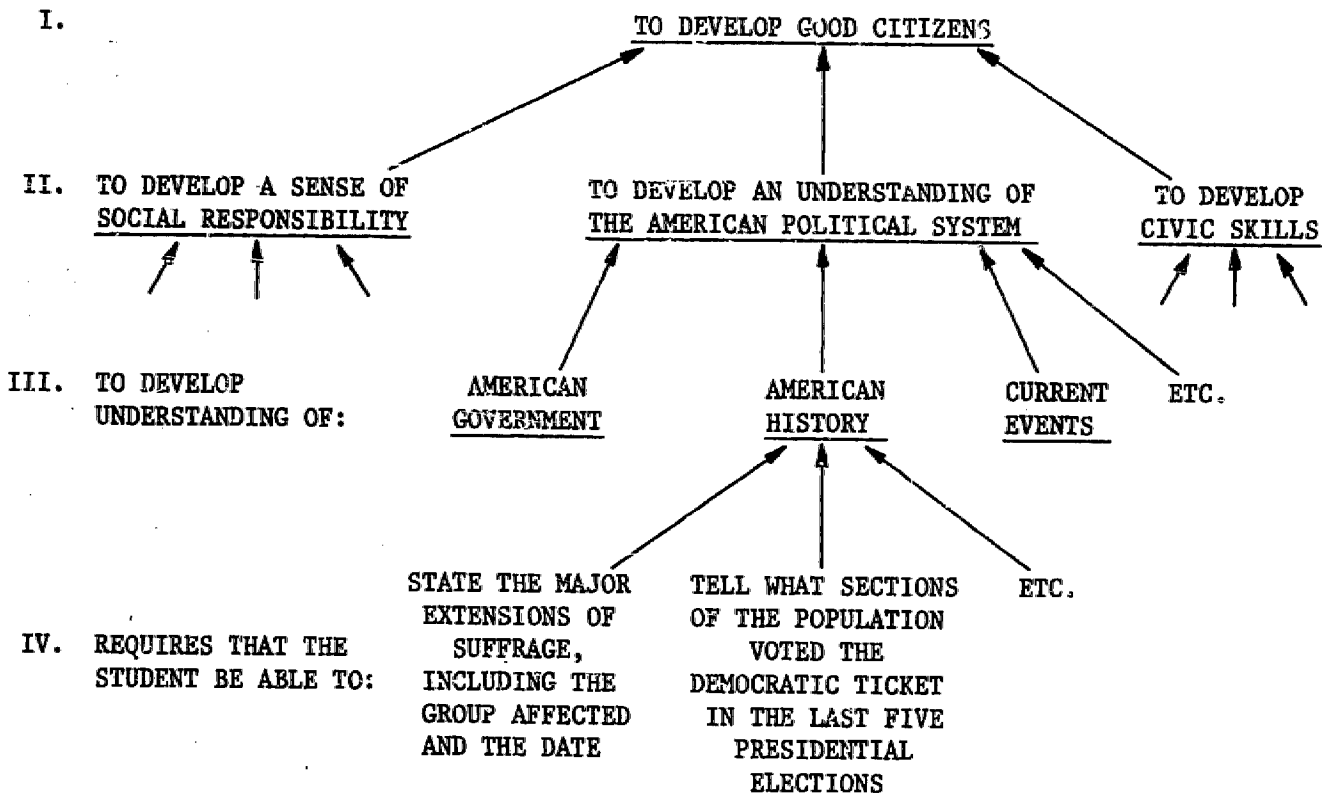


Fig. 1--A hierarchy of objectives

general. Objectives at the intermediate levels (II and III) can describe the major programs and subprograms upon which the program budget is based.

Several points are important. First, lower-level objectives are presumed to contribute toward achieving objectives in the paths above them, so that with the exception of the fundamental values of the society, every objective is also a means for pursuing a higher-level goal. This ranking of objectives is necessary, either because we do not know how to pursue basic values directly, or because we do not have the resources to do so. Whether an objective is an end or a means depends, in general, on who is considering it. For example, a sixth-grade teacher will be immediately concerned with whether his students are mastering sixth-grade history. But their mastery is, we hope, a means to the development of their understanding of certain aspects of American history, which in turn is, we hope, a means to the development of their understanding of the American political system, and so on.

Often we take it on faith that lower-level objectives really do contribute to objectives in the paths above them. A major function of analysis is to uncover inconsistencies between lower- and higher-level objectives by revealing some of the complex interrelationships among them. The feedback on objectives may in some cases be the most important result of the implementation of a program budgeting system.

## CHARACTERISTICS OF OBJECTIVES

So far, the purposes of education have been characterized by phrases like *to produce good citizens* or *to develop the capacities of individuals*. Another common phrase is *to transmit the culture*. These phrases place emphasis on different aspects of education, and each may be interpreted broadly to include or imply the others. Because we cannot assert that an educational system devoted to any one would necessarily fail in the other respects, it seems clear that single phrases of this kind are too general to fully characterize the primary objectives of the American public schools which, as I noted earlier, have evolved to assume more and more responsibility for the development of

our youth and for community service. A set of phrases, then, is what we need--a set that describes comprehensively what the schools are trying to do. For a unified school district, such a set might look something like Fig. 2.

But because the program budget must comprise all of the activities of a school district, the formulation of objectives should be a two-way process requiring not only the identification of what the schools ought to do, but also the identification of what they in fact do. A very sensible way to go about deriving a set of objectives is to list each district activity and for each to ask, What purpose does this have besides facilitating the internal operation of the district? Such an exercise will insure that the resulting objectives are both inclusive and relevant to the district's activities. It will not necessarily reveal what the district ought to be doing.

Thus, we have to do both: We have to try to identify what we feel the schools *should* be doing and set down those as objectives. At the same time we should look at what the schools *are* doing, and see what activity these objectives appear to be directed toward. By matching these two sets we can then identify places where the school districts perhaps are not fulfilling needs that they should be, and perhaps we can also find places where the schools are pursuing activities that are really not of vital importance.

The illustrative set of objectives still describes the aims of the public schools in only a very general way. Just what are fundamental intellectual skills, for example, and by what means are they taught? To answer such questions, each objective must be translated into the activities that support it. This is far from an easy task. Let us postpone discussion of some of the problems involved for the time being.

At this point we shall clarify the idea of a *district activity*. The fundamental aim of program budgeting is to make more explicit the relationships between the resources that are used by the school district and the results of district activities--the development of the students, primarily. If this is a reasonable rationale, it follows that district activities can be partly described in terms of the

- TO BRING ABOUT:
  - LEARNING OF FUNDAMENTAL INTELLECTUAL SKILLS
  - LEARNING ABOUT THE WORLD
  - DEVELOPMENT OF PHYSICAL, SOCIAL, AND EMOTIONAL ASPECTS OF THE PERSONALITY
  - PREPARATION FOR EMPLOYMENT OR FURTHER EDUCATION
- OTHER COMMUNITY SERVICES

Fig. 2--A set of primary objectives for a unified school district

resources used to pursue the given objective. These resources comprise not only money but teachers, facilities, and other material entities. The description of the procedures by which these entities work together, and of their end products, completes the definition of the district activity. Whenever such an amalgamation of material entities, procedures, and end products can be separately identified, this amalgamation is a candidate for a program in the program budget. Everything that can be identified as contributing to the program goal should be included in the definition so that its cost will be fully demonstrated.

Categorizing district activities by primary objectives is a first step toward understanding what the district is trying to do. As suggested before, the converse process, deciding what activities *should* be undertaken to pursue primary objectives, is also needed. Often this exercise reveals that some goals receive little more than lip service in the press for resources.

Because the primary objectives and their contributory programs will provide the basic format for the program budget, they should be relatively stable. Frequent revisions of the format will be time-consuming, costly, and confusing. Thus, it is undesirable to use programs whose life is known to be short, such as the Field Act, which is instigating major building programs throughout the state. Once buildings that fail to meet its specifications have been remodeled or replaced, its significance will fade, so there should not be a program labeled "upgrading buildings to meet the Field Act."

On the other hand, the program budget is tied to the objectives and activities of the district, so its format should not be treated as inviolable. For one thing, almost certainly there will be many imperfections in the initial formulation of objectives, that will be revealed when the program budgeting system is first put to use. These must be changed if the format is to be useful. Then, of course, we can expect that emphases in education are going to continue to evolve, just as they have in the past. The schools may continue to take on new roles, and they may drop some of the older ones. These changes should also be accommodated in the program budgeting system.

In sum, we may list the desirable characteristics of the primary objectives and contributory programs in a school district:

- o *Multiplicity.* Most districts provide for diverse needs that cannot be adequately described in a single phrase
- o *Extrainstitutional orientation.* The public schools fulfill needs in the community, they do not exist as ends in themselves
- o *Comprehensiveness.* The set of objectives should describe all of the major goals of the district
- o *Breadth.* The set of primary objectives should be broad enough to permit fairly wide-ranging variations in programs within them
- o *Specificity.* The meaning of each primary objective in terms of the operation of the districts should be specified by listing as programs those activities whose major purpose is the attainment of that objective
- o *Staying power.* Concerns that seem likely to prevail for only a few years should not dictate the formulation of primary objectives or the definitions of contributory programs

The need for specificity is of particular significance for program budgeting in education because it means that each district's program budget will have a different format in some regards from every other district's program budget. To take a simple example, an elementary district may have no programs whose immediate objective is to prepare the student for employment. Almost all programs of this kind are postponed to senior high school or even later. Of course, we recognize that the elementary school program does prepare students for eventual employment but that is not its immediate and primary aim.

The need for tailoring the set of primary objectives and contributory programs to the using institutions becomes even clearer when we compare sets of objectives for different kinds of educational institutions. For example, the educational programs supported at the Federal level might be listed as in Fig. 3. Note the emphasis on activities commonly thought of as pertinent to higher education and activities concerned with special government interests. Similarly, the objectives

I. CULTURAL AND SCIENTIFIC

- A. Promotion of sciences and the arts
- B. Presentation of cultural values

II. SOCIAL AND POLITICAL

- A. Achieving universal literacy
- B. Promotion of effective citizenship
- C. Maintaining effective military and civilian government services

III. ECONOMIC

- A. Maintaining supplies of social and professional disciplines such as medicine, engineering, management, and business administration
- B. Equipping the underprivileged for productive employment
- C. Maintaining a satisfactory rate of productivity increase

IV. SUPPORT OF EDUCATIONAL RESEARCH

- A. Educationally disadvantaged
- B. Technology in education
- C. Educational management
- D. Etc.

Fig. 3--A set of objectives for education at the Federal level

of educational organizations at levels higher than the school districts, such as the State Department of Education, are not simply the sum of the objectives of all the districts. Such organizations are more concerned with adjusting relationships among the organizations below them, or with promoting special programs that would be inadequately supported otherwise, than they are with the actual operations of the school districts. As a result, the objectives of the State Department of Education might look something like Fig. 4. On the other hand, Fig. 5 shows a set of objectives that could be applicable to a unified school district.

Hopefully, statements of objectives and contributory programs for the school districts in California need not be as different as these three examples. Rather, a single set of primary objectives can probably be comprehensive enough to encompass the activities of all the districts. Each district will then be able to categorize its programs within these objectives with the understanding that some categories may very well be empty for some of the districts. This implies that, by and large, the public schools in California pursue goals that are similar enough to be adequately expressed in a single set of categories that are sufficiently compact to be useful.

## PROBLEMS IN FORMULATING OBJECTIVES

There are difficult problems associated with statements of primary objectives, some of which may not be superficially evident. The first is not difficult to handle in an analytical sense, although it can be very troublesome to the decisionmaker. This is a partial or total conflict among goals. Although diametrically opposed goals like integration and segregation would not be presented explicitly in a single set of objectives, every administrator at one time or another is put in the position of having to consider courses of action that pursue goals that are partly or wholly in opposition. This may be because of pressures from within the school system or from the community at large. It is also possible for goals within a single set to conflict in part. An example of the latter kind of conflict would be the

- TO PROVIDE GENERAL SUPPORT OF SCHOOL DISTRICTS
  - Augmentation of district budgets for ADA
  - School building construction
  - Textbooks
- TO EQUALIZE FINANCIAL CAPABILITIES OF SCHOOL DISTRICTS
- TO SUPPORT EDUCATIONAL PROGRAMS FOR EXCEPTIONAL STUDENTS
  - Physically handicapped
  - Mentally gifted
  - Etc.
- TO PROVIDE CENTRAL EDUCATIONAL SERVICES AND ADMINISTRATION
- TO SUPPORT EDUCATIONAL RESEARCH AND DEVELOPMENT

Fig. 4--A set of objectives for a State Department of Education

1. LEARNING OF FUNDAMENTAL INTELLECTUAL SKILLS

    A. Language and communication skills
    B. Mathematical and reasoning skills
    C. Study skills

2. LEARNING ABOUT THE WORLD

    A. United States and other societies
    B. The physical world and living things
    C. Literature and the arts
    D. Skills for every day living

3. DEVELOPMENT OF PHYSICAL, SOCIAL, AND EMOTIONAL ASPECTS OF THE PERSONALITY

    A. Physical development
    B. Artistic and other self-expression
    C. Development of interpersonal relationships

4. PREPARATION FOR EMPLOYMENT OR FURTHER EDUCATION

    A. Higher education
    B. Vocational training
    C. Immediate employment

5. OTHER COMMUNITY SERVICES

Fig. 5--A more detailed set of objectives for a unified district

encouragement of independent thought in a social-studies course versus the need for some regulation of the student body by the principal and faculty. Conflicts are just facts of life. The formulation of objectives can help to make them more visible, which may clear the air, even though sometimes it is undesirable from the point of view of public relations. In addition, a program budgeting system that encompasses analytical procedures may provide tools for the resolution of some conflicts of this type.

Another problem arises from interdependence of objectives. A study of Fig. 5 reveals instances in which objectives are interdependent in various ways. Successful attainment of one goal may be *required* for successful attainment of another. For example, a student will need at least some language and communication skills in order to attain any of the other objectives. A weaker interdependence is the spillover effect from one program to another. For example, science may stimulate a student to read more and better, and his laboratory work may help improve his interpersonal relations. Another type of interdependence arises from differences among students. Thus, it is quite possible that a course in art that for most students would be just a part of a general education would be the first step in professional training for a budding artist.

Interdependence can be handled in allocating contributory programs to primary objectives by setting up relatively mechanical rules. For example, we might require that activities for the development of intellectual skills that would be needed to attain almost every objective are contributory to the first objective; that studies that impart knowledge and understanding of the world, as opposed to developing skills, contribute to the second; that activities that in the main develop other capabilities of the individual than the intellectual contribute to the third, unless they are quite clearly aimed at preparation for employment or a career, when they contribute to the fourth. And so on.

Obviously, the rules can be much more refined than these examples, but there will inevitably be instances when decisions on which objective a program contributes to will be very difficult. Some school districts present English and social studies as a combined program in senior high

schools, for instance. Whether such a program contributes to objective 1 or 2, or is really two programs, would depend on the relative emphasis given to the two areas of knowledge. Some core programs are intended to teach students how to relate skills and understandings gained in one field of knowledge to problems in another. This has been called *the interdisciplinary approach*. Whether a core program is interdisciplinary depends on what the student's achievement is considered to be. If it is simply his combined achievement in several subject areas, the interdisciplinary nature of the program may be questioned.

Thus, the problem of interdependence among objectives can be solved during categorization by setting up consistent rules for allocating school activities among the objectives and by making sure that sources included in one program do not overlap those in another. But we must beware that this exercise does not mislead us into thinking of their *effects* as independent of each other. That would be dangerous, not only because it is obviously false, but because it can lead to serious errors in analysis.

The most difficult problem, competition among objectives, arises whenever an institution has multiple objectives. The objectives compete for resources. In some institutions the competition may be primarily for money, because the pursuit of different goals may require different means, by and large. A university, which is to a large extent a collection of relatively separate schools and colleges, is an example of this kind of institution. Public schools, on the other hand, use common resources--teachers and facilities as well as money--to achieve most of their objectives, and the competition problem is especially severe for them.

## ANALYSIS FOR DEALING WITH THE COMPETITION PROBLEM

The problem of competition for resources, which is inherent in the primary objectives, can be handled only through analysis. To be sure, one could decide at the outset to allocate a certain percentage of some critical resource, such as teachers, to achieve each primary objective, perhaps by using the same percentages that have been used in the past. In this way the competition problem could be resolved in some sense,

but there would be no assurance that the solution would be desirable, because the past allocation of resources may not have led to satisfactory attainment of the objectives.

The other side of the coin is the problem of deciding what attainment of objectives is satisfactory. For example, we could specify at the outset that some percentage of students should perform at grade level or above on standardized tests in each field--somewhat in the same way that we could have done a similar thing for the resource allocation problem. But what would be the use of such an exercise if it turned out that to meet these goals we would have to double the school budget, for example? The fact is that we cannot propose objectives in any definitive way without simultaneously considering how they are going to be met.

Analysis of the resources required for attaining stated objectives will reveal which are the more realistic in the long run and will help resolve competing demands. Some objectives that compete for the same resources may be made more compatible by devising other means for achieving them. For example, additional State and Federal funds may often be obtained by setting up programs that meet special requirements. In this way, new resources may be brought in to solve particular problems and to free funds for other purposes.

This brings up another consideration--the possibility that there should be upper limits on the attainment of objectives. Although in some cases the attainment of even moderate goals may be beyond the resources available, it is not true that the school system should strive to improve the quality of education without limits. This is not because ever-higher quality is undesirable, but because it is clearly impossible to continuously improve the performance of the schools in every respect within the limited resources that are available. In deciding how to allot these resources among programs, it would be useful to know how far each program is from achieving some goal that seems reasonable. For example, if all programs are unsuccessful, it may not be sensible to concentrate resources on those that are a little worse than the rest. Across-the-board improvements are more likely to be needed. Educators use standards such as these to some extent when they

compare the performance of students on the basis of standardized achievement tests.

The problems of allocating resources among several public services, of which education is only one, also argue for the setting of upper limits on objectives. If the public schools were the only consumers of goods and services, limitations on their quality would be senseless. But such is not the case. Explicit recognition of this fact by educators in the form of upper limits on objectives could increase the community's willingness to support the schools' immediate needs.

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