## A CLASSIFICATION SCHEME FOR OBJECTIVES-BASED EVALUATION SYSTEMS

Ву

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Evaluation Theory Program Center for the Study of Evaluation UCLA Graduate School of Education Los Angeles, California Legislatures are increasingly demanding that schools be more accountable and to achieve this are stressing the establishment of PPBS (Program Planning and Budgeting Systems). Since part of the establishment of such systems requires the specification of objectives, educators have been called upon to provide objectives which are appropriate for PPB systems. Rather than help establish such systems, however, in many instances the objectives which have been provided have created confusion.

The sources of confusion are many: (1) Often the recommended objectives are behavioral objectives. To include objectives of this type simply inundates the system with such a great number of objectives that they are virtually unusable. (2) In some instances, broader objectives are specified and appropriate measures designated. At the same time, however, classroom teachers are using behavioral objectives which bear little relationship to the broader objectives (or at any rate the nature of the relationship is generally unclear).

(3) Often the recommendations are called objectives, or even goals, which are not objectives and which are virtually unmeasurable.

What is the source of the dilemma? Why is it that attention has not been directed to these incongruities? Legislators and others are drawing away from objectives because they fail to understand how objectives and objectives-based evaluation systems (OBES)\* can be meaningful at anything other than the individual classroom unit level.

Frequently it is easier to understand situations when they are placed within a theoretical model or framework. Verbal, visual, or figural categorization

By an objectives-based evaluation system we mean one that is based upon specific, pre-established objectives.

of concepts or procedures often adds to their clarity and provides for greater understanding. In this paper we propose a simple classification of objectives-based evaluation systems in terms of two inherent characteristics or functions they might serve. These two functions are (1) evaluation scope and (2) program generality. To help explain these characteristics, by recalling the areas of ambiguity noted in the first paragraphs of the paper we can see that there are a number of different functions that might be served by an evaluation. On the one hand, an objectives-based evaluation system might be used by a teacher as an instructional device to determine the achievement of students on en-route (or facilitating) objectives. En-route objectives generally represent individual units of learning. On the other hand, the evaluation system might be concerned with evaluating so-called "terminal" objectives, relying not so much upon the manner in which the teacher will teach these objectives but on the expected behavioral outcomes. (These might be one-week objectives, or two-or three-day objectives.)

Since one of the concerns of evaluation is with providing information to decision makers, the various kinds of objectives-based evaluation systems are linked inextricably to the information needs of these decision makers. On the one hand, the decision maker might be the teacher who is concerned about the way in which instruction will take place. Consequently, he may desire information on en-route objectives or on terminal objectives. The elementary school principal may be concerned with monitoring the progress of the program throughout his school and consequently various objective plateaus may be of interest and concern to him as well. In addition, however, the principal and his supervisors in school administration may want evaluative information related to the general progress of students on a semester or yearly basis. Traditionally,

school personnel at this level have relied on standardized tests for their data and have had information reported to them in terms of how their student population is performing relative to "national norms." But while this information is interesting and is the kind of thing that communities like to hear about and newspapers like to report, it nonetheless gives no information on how students are achieving in terms of the specified objectives or the concerns of the total system.

A second dimension upon which OBES might be classified is in terms of program generality; that is, an objectives-based evaluation system might be related to a particular program. A textbook publisher might provide, as part of the teacher's manual, a test to be given in conjunction with use of that particular textbook. This we categorize as a "single-purpose" evaluation system. It is a single-purpose objectives-based evaluation system if the related tests are keyed to the specific objectives formulated for the program and explicit in the textbook. An evaluation system might also be multi-program in that it is not related to the use of a specific instructional program or set of materials. Most standardized tests are multi-program evaluation systems. The problem with these tests, however, is that they are usually not "objectives-based"; that is, the particular items used in the tests were selected not because of their relationship to specific objectives but for other criteria -- one of which is the extent to which the items differentiated between students (gave a broad range of student response).

## SCOPE AND GENERALITY OF OBES

## Scope

Generality		Use primarily in single context	variety of contexts
	Single Program	Achievement Test in Published Textbook	School District Developed Objective-Item Hierarchy
	Multiple Program	Instructional Objectives Exchange (IOX)	SOBE-R

The simple matrix above shows the categories of scope and generality and indicates four categorizations of OBES. While attempts at categorizing specific programs in the cells of a matrix will invariably do more to offend than to clarify, we do feel that it is important to discuss in some form the kinds of OBES that might fit into each of the cells.

We have noted that the typical test found at the end of a textbook is an example of the single-purpose, single-program evaluation system. Such tests are usually related only to the behavioral objectives level and provide users with only one kind of evaluation information; that is, the user is not ordinarily presented with alternative procedures for developing assessment instruments for different evaluation purposes. Thus, in terms of our classification system, such tests are single program (related only to that textbook) and single purpose (useable only for classroom evaluation at the behavioral objectives level.).

It is conceivable, however, that textual material might be developed which is of use for multi-purpose evaluation. To do this, the text publisher would need to develop the hierarchical scheme which places the objectives treated in that program in context with broader goals. This hierarchy would enable the potential user to develop objectives-based evaluations for various decision purposes. In addition to the hierarchy, the potential user might be provided with a user's guide indicating the way in which the objectives of the program are related, and the manner in which the user might go about constructing assessment devices for various specific kinds of purposes.

Fairly recently there have been attempts to extend the use of objectives-based evaluation systems beyond single-program usage. Perhaps this is in some way related to the notion put forth by Popham (1970) that it is not terribly expedient or efficient to expect individual teachers to write objectives.

He feels that this is the case because (1) many teachers do not have the expertise required to write good objectives and (2) the amount of time and energy related to developing an objectives-based system for a single program ordinarily ensures that teachers are not going to participate. This was the basic concept behind the Instructional Objectives Exchange (IOX), established by the Center for the Study of Evaluation, in an attempt to develop a multi-program objectivesbased evaluation system. The concept of the exchange was that it was more reasonable for teachers to select rather than generate their own objectives. Consequently, IOX(1971) has developed broad packages of objectives and items which are appropriate for programs of various types but which are not program specific, and therefore permit the user to select the behavioral objectives appropriate to his particular program. In that sense, IOX materials are multi-program evaluation systems. They are, however, single-purpose in that the objectives are all geared to one level of generality -- that of the behavioral objective. Another example of a single-purpose, multi-program objectives-based evaluation system is the evaluation procedure associated with the reading program being developed by the Wisconsin Research and Development Center. This represents an attempt to develop a reading program which is a multiple program, in essence, since the user is presented with a number of objectives and various program alternative options as to how these objectives might be met. The evaluation system follows this general scheme and includes test items related to each of the objectives. Thus, we would categorize the reading evaluation system of the Wisconsin R & D Center as a single-purpose, multi-program system.

At the Center we are attempting to develop what may very well become a new kind of assessment device; namely, a multi-purpose, multi-program evaluation system, with the prototype of the system concentrating on the area of reading. As might be expected from the preceeding discussion, in order to develop a

multi-purpose evaluation system it is necessary to develop a non-program-specific, total hierarchical categorization of the objectives of reading, and to show the relationships among the various levels by depicting how the objectives or goals are broken down into objectives which become more and more specific down to the behavioral objectives level. This system, the System for Objectives-Based Evaluation -- Reading (SOBE-R), also includes other vital components to an objectives-based evaluation system, such as a pool of items related to each of the behavioral objectives (Skager, 1971). Procedures are being developed to enable the user to enter the system and develop objectives-based evaluations at various levels for different purposes.

It may have become fairly obvious during the course of this discussion that the way to bridge the gap between objectives used by classroom teachers in their day-to-day instruction and goals and objectives used in evaluating schools as total entities is by developing procedures for connecting these various kinds of objectives. We would propose that the development of multipurpose, multi-program evaluation systems in a broad variety of content areas will help to accomplish that purpose. One might note, however, that multipurpose evaluation systems might be developed for a single program and still fulfill the stipulated need for better articulation of objectives across the various purposes or needs of the school. However, efficiency criteria suggest that perhaps the development of multi-program, multi-purpose systems is a superior approach. The Instructional Objectives Exchange was a response to the general inadequacy and unavailability of behavioral objectives in the field. In addition, it was a response to the immense duplication of behavioral objectives production occuring across the nation. The System for Objectives-Based Evaluation -- Reading, a multi-purpose, multi-program evaluation system, is a parallel response to a similar but broader need.

## References

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