This paper investigates the claim that better curriculum planning will be achieved if educators specify educational objectives before selecting learning activities. After consideration of what is meant by "better planning," the author concludes that this claim for planning by objectives is not valid since an objective can neither be a source for deducing instructional activities nor a criterion for selecting the best learning activities. Furthermore, planning by objectives limits instructional planning by, at the outset, narrowing a planner's attention to a detailed consideration of means in a narrow and immediate context. A planning strategy that mutually refines objectives and learning experiences might be more trustworthy. (Author/JG)
The Use of Objectives in Curriculum Planning: A Critique of Planning by Objectives

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The intent of this inquiry is to clarify what objectives may and may not do for anyone involved in planning instruction, whether that planning involves an entire curriculum or a single lesson. The term objective has been used in curriculum discourse at least since Franklin Bobbitt first tried to "discover" objectives by surveying his students to determine what activities adults typically performed. It has not been established that Bobbitt was historically the first educator to use the term objective, but before his era educationists seemed content to speak of aims and goals. These two antique terms must continue to have some value which the term objective lacks for their use persists in today's educational literature and programs.

Aims, goals, and objectives are of a kind and all can be subsumed under the rubric ends or ends-in-view. Educationists, however, have developed a technical distinction between aims and goals on the one hand and objectives on the other. The distinction has two dimensions, level of specificity and span in time. Goals are commonly meant to be general, somewhat vague statements of long-term, ultimate, desirable consequences of schooling while objectives are specific, precise statements of short-term, proximate, desirable consequences (Taba, 1962; Pace, 1958; Lindvall, 1964; Tyler, 1949). Goals and objectives are not mutually antagonistic but rather mutually supportive. Objectives draw upon and help explicate a goal while a goal overarches

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and helps organize many objectives.

There are other forms of ends-in-view. One for which educationists have not developed any technical definition is purpose. "My purpose is to teach students to draw to scale." is a statement that refers to an educational end, but we rarely, if ever, state our formal ends-in-view in such form. Some time ago, in fact, statements of educational ends that describe what one wished to do were banished from curriculum theory (Tyler, 1949) and this ban continues in the present. Since talking about purposes is a natural part of language, I suspect that in practice many of us think about and state purposes as we plan; we just keep them off the record. Fortunately, no practical harm can come to the field as a result of proscribing statements of purpose, for any purpose can be easily reformulated as a goal with no loss of information. "My purpose is to teach students to draw to scale" can be restated as "The student will be able to draw to scale."

Recent times have seen increased attention paid to the form and function, as contrasted with the content, of statements of educational ends. In particular, behavioral objectives are a current focus in the curriculum field's continuing tradition of taking seriously discussions of the ends of education and the characteristics of statements of ends. Although some of the discussion of characteristics of objectives is motivated by a concern for greater clarity
per se in our educational ends, much of the discussion is embedded in a technological conception of curriculum development within which objectives have a central role. The paradigm for this technology is generally agreed to be the curriculum development model presented by Tyler (1949) which prescribes curriculum development in a sequence of four steps: (1) specification of instructional objectives, (2) selection of learning activities as means for attaining specified objectives, (3) organization of learning activities, (4) evaluation of instruction in terms of the specified objectives.

The trend toward a technology of planning has encouraged a wave of interest in the writing, publishing, and exchanging of objectives, not to mention the many workshops for training others to write and use objectives. Many reasons have been offered in justification of this singular concern with objectives, some of which are claims for the practical benefits that derive from precise statements of objectives. One benefit so claimed is that precise statements of objectives facilitate the planning of instruction. This claim, which I shall label "Planning by Objectives," is the topic of this paper.

The Claim for Planning by Objectives

Simply put, the claim for Planning by Objectives says that the activity of planning is better carried out if it
begins with the activity of specifying objectives. Some say that the more specifically stated the objectives, the better the subsequent planning will be. Popham (1969), for example, states that:

Precise objectives stated in terms of measurable learner behavior make it infinitely easier for the teacher to engage in curricular decisions. The clarity of precisely stated goals permits the teacher to make far more judicious choices regarding what ought to be included in the curriculum.

If for the sake of inquiry one asks for an explanation of just how it is that precise objectives make curriculum planning easier or better, a review of the literature turns up little in the way of reasoned arguments which explicate this claim more thoroughly. For example, all that Liger (1962) offers on the question is that:

When clearly defined goals are lacking, there is no sound basis for selecting appropriate materials, content, or instructional methods. After all, the machinist does not select a tool until he knows what operation he intends to perform.

And Tyler (1949) argues only that:

If an educational program is to be planned and if efforts for continued improvement are to be made, it is very necessary to have some conception of the goals that are being aimed at. These educational objectives become the criteria by which materials are selected, content is outlined, instructional procedures are developed and tests and examinations are prepared.

These quotations are consistent with the technological conception of planning in that they present planning as consisting of two distinct phases. First is the specifi-
cation of ends-in-view, preferably in the form of objectives. Second is the specification of the means for achieving the objectives. The seemingly logical nature of this conception of planning—that ends must be considered before means—is intuitively appealing. The notion that "you can't get somewhere if you don't know where you are going" is familiar and compelling. The lack of analysis of the claim for Planning by Objectives may be in part because the logic of the claim seems so obvious that no further discussion is necessary. Yet the quotes do point a direction that an inquiry might pursue in analyzing the validity of the claim. They suggest that objectives facilitate planning in that they are the basis or the criteria for selecting instructional activities. This paper takes up this suggested direction by analyzing objectives both as sources and criteria for instructional activities.

Better Planning

The claim for Planning by Objectives is a procedural question rather than a propositional one. Therefore, our concern here is not with the truth of the claim but with its reasonableness according to some norm. To investigate the reasonableness of the claim for Planning by Objectives; we will need to be clear in what we will mean by "better" planning, which is what Planning by Objectives is supposed to achieve.
Obviously, we cannot appeal to some notion of "rationality" as the norm for better planning, i.e., if one has switched from not prespecifying objectives to doing so, one has necessarily improved one's planning because the planning is more "rational." Such a view praises the procedure while ignoring the product. It also begs the question. To discuss the contribution of prespecified objectives to better planning, we must agree that one is doing better planning if one is producing better plans. Whether or not we have improved our planning by one procedure or another can only be determined by looking at the quality of the resulting plans. This understanding allows us to investigate how prespecified objectives contribute to the producing of better instructional plans.

There are two senses in which one plan can be judged as better than another. Two plans can each have means adequate to their ends, but one plan can have better ends in that its ends-in-view are judged to have greater educational value. Or, if the ends of the two plans are judged educationally equivalent, one plan can have better means; that is, more effective procedures for achieving its ends. As formulated for this inquiry, the claim for Planning by Objectives assumes that the planner has a set of ends-in-view and that the first task of planning is their precise specification. Thus, it would not be appropriate to analyze the claim using
a norm of better planning in the first sense of planning better ends. However, as the earlier quotations illustrate, the claim relates directly to planning better means. Thus, it will be adequate to assess the reasonableness of the claim if we can determine whether or not prespecified objectives serve as source or criteria in producing plans with better instructional means.

**Objectives and Instructional Activities**

Suppose we have a precisely stated objective. Can an instructional activity or a set of activities be derived from it? Unfortunately no, for there is no analytic relationship between an end and a means to that end. Although an objective holds implications for appropriate instructional activities, the information in an objective is not sufficient to deduce a learning activity which will achieve the objective. Knowing that your destination is Chicago does not include the specific knowledge of how to get to Chicago. Thus, our objective is not a source from which we can deduce an instructional plan. This conclusion is not remarkable, but worth putting on the record in order to clarify this sense in which objectives are not a basis for planning instructional activities.

If we cannot deduce instructional means from our objective, where do we get them? It is important to recognize that the development of instructional plans involves generating instructional activities as well as selecting the better ones.
for use in instruction. The generating of activities is an inventive process that can draw on the familiar and the imagined. When faced with the task of generating instructional activities, we can refer to our personal experience with previous plans or our knowledge of other instructional programs. We can also create new activities and modify familiar ones in novel ways. Thus the sources of instructional means are memory and imagination.

Can our precisely stated objective be a criterion for selecting instructional activities? One could imagine a person being given a set of instructional activities and an objective; the person could eliminate any activity that is judged to be unrelated to the objective. But the planning task does not consist of selecting activities that are appropriate to an end-in-view, but with the selecting of the better activities for achieving the end-in-view. And an objective is not the criterion for selecting the better activities.

What makes the planning of better instructional activities a complex and non-technical matter is the fact that each activity has not one but multiple consequences. Routes to Chicago differ in the time they take, expenses, scenery, etc. Selecting the better activities requires that as many as possible of the consequences of each alternative be anticipated. Those activities whose consequences are judged most likely to contribute to the end-in-view and which do not
have unacceptable side effects are the better. A particular end-in-view can be only one of the many consequences of the means we adopt. An objective can hold implications for what activities may be appropriate; it cannot be a criterion for selecting the better appropriate activities.

The Nature of Planning by Objectives

The thrust of this inquiry so far has been directed at the reasonableness of the claim that prior statements of precise objectives will improve instructional planning. We have seen that there are several forms of ends-in-view, that the norm of "better planning" must be understood in terms of the quality of the product not the process, and that objectives cannot be a source for deducing instructional activities nor criteria for selecting the better activities. In sum, no support was found for the reasonableness of Planning by Objectives.

We must be clear concerning the significance of this finding. We have not invalidated the logic of specifying ends before means. Rather, we have found that the activity of specifying objectives does not help us later to derive or select the best instructional means. However, this finding applies to goals as well as objectives, for we could analyze a claim for Planning by Goals and reach the same conclusion. Indeed, no form of end-in-view is superior to another as far as facilitating the generation and selection of better
instructional means. The significance of our finding, then, is that one can plan as well by beginning with goals as by beginning with objectives. Or to put it differently, level of specificity is not a useful lever for improving the planning of instruction.

Whether Planning by Objectives has other qualities which make it a preferred procedure for instructional planning is a question for further discussion. For the sake of further inquiry, the question can be formed as follows: What are the consequences of planning in terms of specific objectives rather than more general goals? Let us approach the question by way of an example. Suppose our purpose is to teach eighth graders to use coherent paragraphs in their writing. We can formulate this purpose as a goal as follows: The student will use coherent paragraphs when writing. This statement is a goal because it refers to a desired consequence of instruction. It is easy to begin imagining instructional activities. We could give students an essay with no paragraphs and ask students to identify major ideas in the paper. After a list of such ideas has been written on the board, the students could be asked to paragraph the essay so that the ideas would be more easily identified by a reader. Another possibility would be to ask students to compare a set of paragraphs which differed in how each developed and supported their major idea or ideas. Some paragraphs would use specific examples, others comparison and contrast, and others analogy. After studying and discussing the examples,
students could write short essays using one or more of the paragraph techniques. Still other activities might be to collectively write paragraphs on a topic provided by the teacher, analyze badly paragraphed essays, and complete partially formed paragraphs whose main idea has been underlined.

But suppose that instead of moving directly to the consideration of instructional activities, we elected to spend more time in order to state our general goal as a specific behavioral objective as follows: Given a topic sentence, the student will write a paragraph containing a main idea supported by specific examples. This behavioral objective may not satisfy every conception of what a behavioral objective is, yet it does have an observable behavior ("write a paragraph"), a condition ("Given a topic sentence"), and a criterion ("contains a main idea supported by specific examples"). It is surely more precise than our goal, and it is only one of many behavioral objectives we could write to explicate our goal.

Notice that the requirement of behavioral specification has caused us to delimit what we want students to learn insofar as it is embodied in our stated end-in-view. The objective is more proximate and more limited than its parent goal. This narrowing of purpose is in the nature of Planning by Objectives and is consistent with the distinction between goals-as-general-and-ultimate and objectives-as-specific-and-proximate. In turn, we will delimit the activities that
we can consider. In light of our objective, we need not concern ourselves with activities in which students choose their own topic, or with paragraphs which use anything but specific examples to support main ideas. If the anticipated consequences of those excluded activities are valued, then additional behavioral objectives must be specified. It is also in the nature of Planning by Objectives that much time and many objectives are needed to particularize a single goal.

The Consequences of Planning by Objectives

The move from goal to behavioral objective shifts our end-in-view from further-term to nearer-term. This shift gives rise to two consequences. The first consequence is more conceptual than practical and reflects on the internal consistency of Planning by Objectives. Because it is a near-term particularization of the further goal, our objective can be viewed as having instrumental value for attaining the goal. Indeed, as specified, our objective describes an instructional activity quite serviceable as one means toward the goal. This being the case, the distinction between objective-as-end and instructional-activity-as-means, a distinction central to Planning by Objectives, is suddenly confused. Is our behavioral objective an end or a means?

The response, of course, is that it is both; the objective is a proximate end-in-view which is a means toward
an ultimate end-in-view. Dewey (1939), in his Theory of Valuation, discussed at some length the relationship between ends and means in the process of valuing and appraising alternative courses of action. Among other things, he pointed out that a thing can be an end-in-view in one context and a means to an end in another. For a horseless person, a horse can be an end-in-view attainable through such means as buying, begging, borrowing, or stealing. Having attained it, the same person can use the same horse as a means of travel to other ends. Likewise, we may focus on the skill of writing paragraphs using specific examples, and at the same time view it as a means toward the more general ability to paragraph an essay.

An instructional plan, like any plan, can be thought of as a sequence of linked activities, each activity being a means to those that follow it and an end to those which precede it. Thus being a means or end is relative to other means and ends. There are no such things as absolute means or absolute ends. Thus, the ends-means separation which forms the conceptual basis for Planning by Objectives is not so simple as it would seem. One does not as a singular activity specify the ends of instruction, then as a separate task specify the means. Rather, one plans a sequence of activities connected as ends and means to each other in a coherent way and leading to the ultimate goals in mind. Planning by Objectives urges attention at the
start of planning to the proximate activities, the more "meansy" activities rather than the longer term "endsy" activities. Consequently, while demanding a clear separation of ends and means at a conceptual level, Planning by Objectives considers what are means in a larger context in the name of considering ends in a narrower context. This consequence is not so much one of contradiction as oversimplification in the way we view what we are doing when we plan.

Someone unconcerned with conceptual tidyness might argue that this oversimplification is not important as long as the job gets done. And this response brings us to a second consequence of Planning by Objectives, a practical one related to the way the job gets done. Planning by Objectives would seem to get the job done by breaking up a general goal into a list of specific objectives at the beginning of the planning process and then proceeding, one objective at a time, to consider instructional activities for each objective. In continually focusing on the near-term, Planning by Objective makes the planner nearsighted.

Any end-in-view suggests some instructional activities and not others. And an objective suggests a more limited range of activities than a goal. The practical consequence of nearsighted planning is that instructional means are always considered in limited contexts. Planning by Objectives constrains the amount of creative space available
for generating instructional activities. Further, the activities we described earlier for paragraph writing have consequences beyond the behavior specified in the objective. For example, embedded in a set of activities is a view of what writing involves and how good writing occurs. This view is not explicit in the objective, yet students can learn it as a result of the instruction. Planning by Objectives will likely present the process of writing in ways that other planning processes will not.

**Toward Better Instructional Planning**

Instructional planning begins with an end-in-view and results in a set of selected instructional activities, goals, and objectives. It has not been the intent of this inquiry to argue that objectives are irrelevant to the production of better instructional plans. On the contrary, goals and objectives have an important function in instructional plans and that is to communicate the desired consequences of instruction. We must make every effort to articulate those desired consequences as clearly as we can through our goals and objectives.

Planning by Objectives is one way to plan but it is not the only way. The consequences of Planning by Objectives extends beyond the intended clarity of the ends-in-view and touches not only the process by which instructional means are considered but the view of the subject matter.
that the student may learn. If Planning by Objectives is not reasonable and it has other consequences for planning, then the curriculum field may wish to consider alternative planning procedures. One alternative might be a mutual refining of ends and means with reference to each other until a plan is developed which contains the best possible set of ends and the best set of instructional activities for achieving those ends.


