The adoption of a behavioralist stance in education—namely, that of the "specificationist" who attempts to strengthen the humanist position by examining the behaviors which educators are trying to shape and by finding the most effective methods of instruction for accomplishing these ultimate goals—can help rid the schools of their worst evils and improve the quality of education. This may be accomplished, first, by examining the behavioral characteristics of the liberally educated adult to see what behaviors should be encouraged in students; and second, by employing the following tentative rules for writing behavioral objectives which are useful in guiding instruction without becoming trivial: (1) write behavioral objectives only for higher level behaviors to avoid triviality, (2) state all behavioral objectives in binary terms--pass or fail, present or absent—thus placing emphasis on the success or failure of the teacher and not on the ranking of students, and (3) define behavioral objectives broadly (e.g., students will cut class less often, fewer students will drop out of school.)
THE LIMITATIONS AND ADVANTAGES OF
BEHAVIORAL OBJECTIVES IN THE ARTS AND HUMANITIES*

by

James Hoetker

There are three sorts of behaviors that educators are concerned with. I am going to call these "can-do" behaviors, "may-do" behaviors, and "will-do" behaviors. "Can-do" behaviors are those specific things that a student can do at the end of a particular unit of his education that he could not do at the beginning of it; in terms of Bloom's Taxonomy, the "can-do" behaviors include knowledge, comprehension, and the application of knowledge in familiar situations. "May-do" behaviors are things a student may be able to do in a novel or unfamiliar situation because he has mastered certain "can-do" behaviors. These would include, among cognitive behaviors, the application of abstractions in novel situations, analysis, synthesis, and evaluation; plus, among affective behaviors, attending, responding, valuing, and, in some cases, organization. "Will-do" behaviors are the choices and preferences that describe the quality of an adult's life, and which are present only fractionally during the school years. The affective Taxonomy refers to "will-do" behaviors as "characterization by a value or a value complex."

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Traditional education is concerned with "can-do" behaviors—skills and knowledge. Progressive or radical educators are more concerned with "may-do" behaviors. But all educators profess to believe that the can-do and may-do behaviors they shape from day to day lead to the development of desirable patterns of will-do behaviors—patterns which describe good citizens, free men, cultured gentlemen, or whatever.

Unfortunately, will-do behaviors are, by definition, exhibited in times and places far removed from the training situation, so teachers seldom know whether their efforts have borne fruit. These elements of time and distance also make it unlikely that behavioral scientists will ever be able to establish empirical relationships between particular can-do or may-do behaviors and particular patterns of will-do behaviors.

Let me coin the term "specificationist" to refer to the behavioralist who advocates the specification of educational objectives in behavioral terms. And let me suggest that responsible specificationists acknowledge their inability to deal with will-do behaviors and are simply saying to educators something like the following: "I will accept, in the absence of any contradictory evidence, that you know what you are talking about when you say that studying literature and art makes a person somehow better. But what you do in your classroom is to expose students to certain experiences and have them learn special skills, memorize great numbers of facts, and perform certain operations. Let us assume you are correct that these experiences and mastery of these tasks leads to the development of the will-do behaviors that you desire."
Then it follows that shaping the can-do and may-do behaviors more effectively will make the acquisition of the desired will-do behaviors more likely. If you can carefully describe for me the behaviors you are trying to shape, maybe I can help you to evaluate more precisely your success as a teacher and help you to find the most effective methods of instruction."

As a reasonable specificationist, I believe that our educational practices can be improved if teachers and administrators and curriculum writers begin to think about their work in terms of changes in student behaviors. But, as a humanist, I also think that simple-minded insistence upon the a priori specification of all objectives in terms of conveniently observable behaviors does far more harm than good.

The sad fact is that not all specificationists are reasonable. It is inevitable that specificationism has had its share of converts who can do nothing with ideas except turn them into slogans, passwords, and shibboleths. And these sloganeering specificationists, I am afraid, are responsible for much of the hostility that exists among humanistic educators to the idea of behavioral specification.

At their all too frequent worst, these troublesome zealots are like the man in the old "Twilight Zone" episode who found himself mysteriously transported back to a small midwestern town in 1910. "Wow," says the man, looking around, "with my knowledge of modern technology, I can really take over back here." The man goes to a machine shop where two brothers are handcrafting a car. "O.K., guys," the man says, "I
have a million dollar idea for you. The electric starter for the automobile." The men, of course, are interested. "Great. Give us the blueprints and we'll get right to work." "Blueprints?" says the man, "I'm a thinker, not a mechanic. I've given you an idea that will make you rich. You clods make it work, and I'll sell it."

For some reason, the brothers did not appreciate the man's offer of riches, and they ordered him out of the shop. Teachers in general, though some have found trying to write behavioral objectives an enlightening exercise, have ushered specificationist advisers out of their shops, and for the same reasons.¹

So maybe the first question to be dealt with is, why has the insistence upon behavioral objectives continued to grow more urgent? Some years ago, Elliot Eisner tried to answer this question by tracing the concern with microscopic specifications of objectives back fifty years to the "scientific movement in education"² and to Franklin Bobbitt, "the father of curriculum theory."² One of Bobbitt’s disciples, he reported, identified 1,581 social objectives for English before he ran out of steam.³

The early specificationist zeal lapsed during the progressivist thirties, when concern was more for processes than for singular objectives. Then, according to Eisner, specificationism was revived in the late forties and early fifties by such influential writers as Benjamin Bloom, Ralph Tyler, and Virgil Herrick. But Eisner's interesting history does little to explain why specificationism has become ascendant.

Ray Callahan has shown how the "scientific movement in education"
was one manifestation of a broad social movement, originating in industry, toward efficiency, rationalization, and human engineering. In the same way, the contemporary rage for specificationism in education is part of the new ushered in at the resurrection of the turn-of-the-century efficiency expert in the guise of the systems analyst. Abetted by the computer revolution, systems analysis and cost effectiveness procedures were first developed and applied in the armed services and in defense industries. And specificationism has come into its own as system analysis concepts have been more and more widely applied in civilian institutions. The influence of the systems analysts upon public education has been exercised primarily through the U.S. Office of Education, in the interests of evaluation, efficiency and accountability; and through the more prestigious graduate schools of education, in the interests of rigor in research and efficiency in school administration.

Now the point has been made well and often that democratic civilian institutions are so much more complex than autocratic military institutions that systems analysis procedures are not applicable to the management of civilian enterprises—unless, of course, the civilian enterprises are restructured to meet the needs of the systems analysts. Similarly, it can be argued that the education of a human child is an infinitely more complex task than the management of an institution; and that the specificationist's doctrines, in their extreme form, can be applied to the management of an education only if "education" is narrowly enough defined for specificationism to deal with it. Such a redefinition is currently being urged by influential and powerful
voices in education; and the net result of the specificationist movement may conceivably be to exaggerate the most grotesque features of existing American schools—standardization, rigidity, regimentation, and authoritarianism.

But this is not necessarily what must happen. Liberal education is vulnerable to attack from the specificationists primarily because humanists and artists have not paid enough attention to behaviors, and have ignored the relationships between ends and means. Humanist attacks upon the specificationists may be rousing and witty and satisfying, but they are too often snobbish and self-serving, too often empirically ungrounded, too often attacks upon "science" rather than arguments to the issues.

My contention is that the adoption of a behavioralist stance in regard to the content and processes of a liberal education can help us to rid the schools of their worst evils and to improve the quality of education. I am arguing that the specificationists have a better way of talking about the instructional process than the humanists have had, and that the humanists would be foolish not to try to understand the specificationist way of thinking, so that they can put specificationist technology to use in strengthening the humanist position. And I am arguing that this can be done without anyone's having to subscribe to a mechanistic reductionism or involve himself in a lot of metaphysical foolishness. Europeans, after all, borrowed gunpowder from the Chinese without becoming Buddhists; the Greeks began to use the Phoenician's alphabet without abandoning the Olympian gods.
Let me suggest two ways that humanists can use the specificationist's insights to improve education in liberal studies and the arts. The first is rather general, and has to do with the analysis of instruction. The second is more specific, and involves a set of rules for writing behavioral objectives which are useful in guiding instruction without becoming trivial.

There is certainly nothing original in the observation that there is little correlation between the goals educators profess and the daily goings-on in their classrooms. We talk and write incessantly about aesthetic sensibility, culture, creativity, appreciation, empathy, imagination, and so on. But the evidence continues to pile up that teachers and administrators are concerned almost exclusively with can-do behaviors of the narrowest sort. The most popular instructional method is still the rote recitation over the textbook. The cognitive activities most often demanded of students are memorization, recall, recognition, and reproduction. The ambience of the typical classroom swings between tense boredom and dull depression. Curiosity, self-assertiveness, independence, individuality, and overt expressions of self-respect are punished or more cleverly discouraged. The situation is, in short, that many behaviors that are elicited and reinforced in school situations are logically and emotionally incompatible with the liberal objectives schools profess.

One can admit the impracticality of specifying in behavioral terms the ends of liberal education, while still insisting that there has to be some relationship between what we do every day and what we finally
achieve. At the very least, we cannot shape one sort of behavior day after day, year after year, and expect that at the end of their educations students will manifest precisely the opposite behavior. We cannot teach critical independence by insisting on the mechanical application of memorized critical formulas. We cannot teach respect for thought by attending only to mechanics and forms of expression. We cannot teach honest self expression by punishing disagreements with established opinions. We cannot teach students to be free citizens by treating them as witless ninnies. And, above all, we cannot teach students to honor the common humanity of all men by expressing contempt for the student's own humanity in our every word and gesture.

As a start then, let humane educators begin to think in terms of behaviors at this level. What are the things a liberally educated man does that are not done by the uneducated? What are his preferences, responses, pastimes, expenditures, companionships, activities that distinguish him from those who have not had his advantages? And then: which of these behaviors of the liberally educated man do we actively discourage our students from exhibiting? Which of the behaviors of the uneducated man do we reward our students for exhibiting?

From the commonsensical analysis of what is actually done in classrooms, we can infer what are the real objectives of teachers and we can infer what behaviors students are really learning. Where such an analysis reveals that the can-do and may-do behaviors that are actually being practiced and learned are self-evidently incompatible with the long-term, will-do objectives of the discipline, then we have advanced
In our knowledge; then it becomes logically inescapable that we must either change our practices or bring our objectives in line with reality. But the habit of thinking about educational objectives in behavioral terms can also make the more positive contribution of improving our instructional practices. I want to suggest a very tentative set of rules for humanists attracted by the idea of behavioral objectives. Following these rules—or rules like them—one can avoid the obvious impracticalities of doctrinaire specificationism, while still taking advantage of the basic soundness of the behavioralist's hardheaded insistence upon public evidence.

RULE ONE. Never write behavioral specifications having to do with can-do behaviors. There is already far too much concern with such things in conventional classrooms. Everyone says that such learnings are not ends in themselves, but groundwork for the development of higher level may-do and will-do behaviors. Let us concern ourselves, then, only with finding ways to operationalize the higher level behaviors. Simply by refusing to concern ourselves with operationalizing lower-level can-do behaviors we accomplish several things. We avoid the reduction to absurdity, inherent in specificationism, which can lead to lists of 1,581 social objectives for English. We avoid the charge of triviality so often thrown at attempts to behavioralize objectives in the humanities and arts. And we free teachers from a lot of poor and unprofitable labor. Let us write behavioral objectives, then, only for higher level behaviors. If they are displayed, then we may assume that the requisite lower level tasks have been mastered. If
the higher level behaviors are not displayed, empirical evidence that students have nevertheless mastered the so-called foundation tasks is actually an indictment of our incompetence. If we really do not value quiz-show knowledge for its own sake, let us stop dignifying it; and let us certainly not waste our time writing behavioral specifications for every little gobbet of fact in our discipline.

RULE TWO. State all behavioral objectives in binary terms: pass or fail, happen or not happen; present or absent. This enables us at a stroke to avoid the problems of criteria, baseline data, and levels of student achievement. The statement of the objective should be a description of the behavior to be performed or the product to be produced or the activity to be engaged in. The only question involved in evaluation is whether a particular student or a particular class did or did not do or produce what the objective describes. Teacher concern for finer measures of gradations of performance can be justified only on the basis of wanting to rank order students rather than teach them. Note that with a dichotomous objective it is not the student who is being evaluated as having achieved this or that percentage of mastery. Rather, it is the teacher who is evaluated as having succeeded or failed with this or that percentage of his students or his classes. This gives the teacher the inestimable benefit of a public and objective criterion by which his work may be judged, the same criterion that is used to judge coaches, who win or lose so many games, and generals, who win or lose so many battles.

Within the constraints of the first two rules, may-do behaviors
are the ones to be specified in behavioral terms. May-do behaviors are produced in response to novel stimuli and can be thought of as fractional components of will-do behaviors. They resemble can-do behaviors in that they are elicited by the teacher and can be observed at a particular time; but they resemble will-do behaviors in that the details of the performance are, within limits, chosen by the student and are indicators of his cognitive organization and his personal value system. The may-do behaviors that can be specified in behavioral terms need not be scholastic behaviors in any usual sense; they may be behaviors which are signs that the student is newly open to or is seeking certain competencies or understandings; or they may be behaviors which will expose the student to the possibility of further learnings.

RULE THREE. Do not define behavior too narrowly. All the following might, in certain circumstances, be the behavioral objectives of an instructional sequence: the students will cut class less often; the students will express enjoyment, laugh; the students will touch one another; the students will take a walk in the woods; the students will begin to speak out in defense of positions they feel strongly about; the students will question or criticize authority; the students will try to help or protect younger or weaker students; the students will play the roles of persons very unlike themselves. The students will ask to do additional work of a certain kind. And so on.

Let me give you just two examples of what may come of the application of these rules. The first example is from some of Alan Engelsman's
and my own work in developing drama curricula for English classes. The main thing we were concerned about was teaching students how to "visualize" as they read a play. We concerned ourselves only with the may-do behaviors involving visualization, not with whether students could verbally define the term or remember the many ideas and examples presented in the lessons. We defined "visualization" behaviorally, in terms of student performance on tasks of increasing complexity. Each task was a problem which the student solved or did not solve. Some of them involved role-playing situations: the student who was not imagining the script in terms of movements and bodies might find himself standing as he said, "I'm on my knees like a fool." Others involved written responses. For instance, students were given an excerpt from Antony's funeral oration and asked one simple question: What would you see happening during this scene if you were on a high building overlooking the Forum? If the student mentioned Antony's stripping the cloak from Caesar's body, he had behaved in such a way as to demonstrate he was visualizing the scene; if he did not mention this essential action, he was not visualizing, no matter what else he may have written. Other behavioral indicators of progress, built into the lessons, included such questions as whether or not, by particular stages in the lesson, students have voluntarily brought in props, voluntarily memorized their parts, read unassigned parts of the play being studied, and so on.

A succession of such explicit behavioral signs of progress is,
obviously, useful to the teacher as a source of feedback to help him decide what tack to pursue in the next class and as a source of information about the progress of particular students.

But other sorts of behavioral specifications can give guidance of a more general sort. In one case I know of, for example, a committee of high school English teachers were asked to produce a set of behavioral objectives for the low track or basic English classes in the school. Their feeling was that there were certain observable physical states in which achievement was more likely to take place than in others. They felt further that positive changes in these states were self-evidently related to positive changes in affect toward the subject matter and the tasks involved in mastering it. From these assumptions, they drew up a list of unorthodox behavioral outcomes which included items like the following.

"Absences from Basic English classes will be lower than they were last year."

"Fewer 11th and 12th grade Basic English students will drop out of school than dropped out last year."

"A smaller proportion of students in basic classes will receive semester grades of D and F than in the preceding year."

"An examination of each teacher's grade book at the end of the year will show a decline in the number of late or missing assignments."

"The number of students participating in class activities and the length and frequency of their contributions will increase during the year."

Such objectives have several important characteristics. First of all, although they are stated in terms of class behaviors, rather than
individual student behaviors, they meet the specificationist criteria for the writing of educational objectives, or can easily be rephrased to do so. Second, they have face validity as indicators of changes in student behavior in a direction essential to the attainment of desirable will-do behaviors. Third, though they do not specify anything about the content or organization of the course, they imply a great deal about how the teacher wishing to attain these objectives will interact with his students and how he will arrange his priorities. Fourth, the same objectives may be--and were--stated at all grade levels, thereby putting upon each teacher the clear responsibility for moving his students further ahead and providing a sort of articulation that is organic rather than artificial or arbitrary. Fifth, the objectives are so stated that the teacher's class attains a particular objective or it does not. Once a teacher has accepted such goals as the definition of his job, there is no room for self deception and no point in blaming the students for not achieving.

Within such broad guidelines as those provided by these sorts of objectives, the more limited objectives, such as teaching students to visualize, have their place. Still, the process of writing sound and useful objectives for particular lessons is not something to be done in the abstract or before the fact. The broad behavioral goals for a year's work should come first, and the sensitivity to behavioral signs and processes that will develop when one is working in full consciousness of such objectives will lead to the emergence or the discovery of the more specific objectives.
Several years ago Alan Engelsman and I began work on some drama curriculum materials by spending two weeks with a group of thirty English and drama teachers, trying to discover what they wanted, needed, and would accept. Most of the teachers had had an exposure to specificationism, either in college courses or in summer curriculum workshops. Their hostility to specificationism and to its avatars, Bloom's Taxonomy and programmed textbooks, was unanimous, absolute, and unshakable. At the root of this hostility seemed to be the common experience that the presenters of specificationism were arrogant, badly educated, and clearly of the opinion that anyone who could not sit down and write behavioral objectives for his discipline was a fraud and an incompetent.

Accepting the experiences and attitudes of these teachers as representative, we were careful in writing our materials to avoid the jargon of specificationism and programmed learning. Our experience has been that behavioral specifications of objectives, presented within the context of a particular sequence of work, and without the jargon, are accepted as self-evidently useful by teachers who would be turned off at once by an abstract presentation of specificationist doctrines.

"Franklin Bobbitt and the 'Science' of Curriculum Making," The School Review, 75 (Spring, 1967), pp. 29-47. An article by Eisner in a later issue of School Review is perhaps the best exposition of the humanist's objections to specificationism: "Educational Objectives, Help or Hindrance," School Review 75 (Autumn, 1967), pp. 250-260. Eisner's article is followed by a number of commentaries (loc. cit., pp. 261-281), most of which attack Eisner's remarks. The most telling criticism of Eisner in these commentaries is that he misrepresents specificationism by considering only its most extreme and dogmatic pronouncements.

Eisner, "Educational Objectives...," p. 252


The first applications of systems analysis in education took place in the military, and it is probably more than an accident that the educational ideal of some specificationists seems to be the military classroom, with its ironbound curriculum, its stereotyped procedures for attaining narrow objectives, its interchangeable and volitionless instructors, and its standardized proficiency tests.


8 Or at least that should be the case. Actually, things are more complicated. For instance, fifty years of research studies have concurred in finding that there is no connection between the can-do behaviors shaped in the study of language and linguistics and the may-do and will-do behaviors which English teachers have identified as their objectives. It is instructive that the response of some English educators to their long-delayed acceptance of this evidence has not been to abandon compulsory language study, but to try to dispense with objectives altogether so that they can continue to concentrate on teaching can-do behaviors. The study of language is interesting for its own sake, the argument goes, and that is justification enough.

I bring this up in the present context only because it seems likely that this particular ploy is going to prove increasingly attractive as a way to avoid the challenge presented by the specificationists. But the "I teach it because it is interesting" dodge does not solve the problem, it simply redefines it. I certainly think that "interest" and its stronger relatives, joy and ecstasy, are commendable objectives and have been too long ignored by our educational systems. And I also think it is completely reasonable to demand that the educator who is working toward these objectives be able to specify in behavioral terms what a student does when he is feeling interested or joyful. Pleasure is a desirable condition in itself, and it motivates and accompanies and follows successful learning. But if one says pleasure is the terminal objectives of an instructional sequence he has undertaken, then he must consider that he opens himself to the objection that his students might be given more pleasure by other means. He must be ready to explain how the particular kinds of pleasure behaviors he wishes to elicit are different from and preferable to those elicited by drama, rock music, dance, movies, sex, pot, or simple freedom from any imposed tasks at all.

9 To the researcher, evidence of change without measures of the magnitude of the change would seem trivial. But the teacher's needs are different than the researchers'. Besides, the expression of objectives as binary choices does not rule out the obtaining of as much other data (test scores, grades, etc.) as one might desire. It simply means that objectives will not be expressed in terms of such criteria (unless in pass-fail terms) and that the primacy of the binary objectives may at times dictate that certain conventional measures are pedagogically undesirable.