This booklet explores some of the issues concerning five major problems regarding educational accountability. These are problems of skills and behavioral objectives, intelligence and holistic behavior, the nature of learning and the causes of behavior, humanistic goals of education, and professional accountability. General comments about methods of assessment initiate the study of the problems. The problem of skills and behavioral objectives is presented in light of rationale for behavioral objectives and some hazards of the behavioral approach. Assessing intelligent behavior and implications of accountability are seen as major issues of the problem concerning intelligence and holistic behavior. The nature of learning presents the causes of behavior and learning as personal meaning. Self-actualization and the assessment of personal meaning are discussed in relation to the humanistic goals of education. Finally, professional accountability is observed in terms of the delegation of responsibility. The summary indicates the need for a balance of behavioral and humanistic objectives in education. (MJM)
EDUCATIONAL ACCOUNTABILITY

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Beyond Behavioral Objectives

Arthur W. Combs

Director, Center for Humanistic Education
College of Education, University of Florida
Gainesville, Florida

Foreword by Jack R. Frymier

Association for Supervision and Curriculum Development
1201 Sixteenth Street, N.W., Washington, D.C. 20036
Contents

Foreword / v
Jack R. Frymier

Educational Accountability:
Beyond Behavioral Objectives / 1

Some General Comments
About Methods of Assessment / 2

Skills and Behavioral Objectives / 4
The Rationale for Behavioral Objectives / 4
Some Hazards of the Behavioral Approach / 6

Intelligence and Holistic Behavior / 11
Assessing Intelligent Behavior—a Holistic Problem / 12
Implications for Accountability / 15

The Nature of Learning and the Causes of Behavior / 17
The Causes of Behavior / 17
Learning as Personal Meaning / 20

Humanistic Goals of Education / 23
Self-Actualization—Primary Goal of Education / 23
The Assessment of Personal Meaning / 25

Professional Accountability / 33
Who Is Responsible for What? / 33
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Foreword

Arthur Combs is an interesting phenomenon on the American educational scene. He insists upon focusing on human problems and human potentialities, while others are advocating sophisticated management systems, performance contract arrangements, or propositions for controlling behavior. He is obsessed with the notions of personal growth and human freedom, and he argues persuasively for professional perspectives and professional means to achieve those objectives.

In the pages which follow, Professor Combs develops two sets of ideas. First, he analyzes the practice, the history, and the assumptions behind the press for “accountability” and “behavioral objectives” which is present in America today. Second, he articulates several considerations about accountability and learning which he feels are more important and more in keeping with our ideals than those which inhere in a narrow, behavioral objectives approach. He actually redefines accountability in human, professional terms, setting forth in criteria form a new and more useful conceptualization than the behavioral objectives model allows.

Those of us in ASCD have come to expect these kinds of statements from Art Combs: “The fact that complex goals and procedures cannot be simply stated is no excuse for giving them up.” Or, “We can live with a bad reader; a bigot is a danger to everyone.” Or, “Measuring what we know how to measure is no substitute for measuring what we need to measure.”

Many of those who are pressing the accountability concept in terms of behavioral objectives are really saying that schools should teach what teachers can test. In practical terms, this means that testing instruments tend to become legitimized as educational ends rather than professional means, and this Combs deplores.

The behavioral objectives model and contingency management come out of the industrial production mold. The input-process-output model which characterizes our conceptions of production lends itself beautifully to the behavioral objectives approach. The only trouble is, people are not things. Men can produce boxes and
objects and things, but man cannot produce people. One man and one woman can create new life through sexual activity, of course, but beyond that very meaningful and rewarding aspect of human existence, man cannot produce any living thing. He can help corn grow, for example, but he cannot grow corn. Man can foster and facilitate growth by varying the environment, adding nutrients to the soil, bringing water through irrigation if that is needed, but man cannot grow corn. The corn does the growing on its own.

In the very same way, man cannot learn children, but he can help children learn. He cannot grow a child, but he can help a youngster grow—intellectually, emotionally, physically, or otherwise. Men can build houses and airplanes and things, but they can only work with the life process and alongside of growing organisms to help the persons or plants or animals develop and grow on their own.

What has been said may seem ridiculously obvious, but it must be said, anyway. Those who press the ideas of accountability in narrow and economic terms must be confronted directly by those whose primary commitments are to help children learn and grow. The learning process is unrelated to economic theory or political theory, and though it can be conceptualized in terms of “economic efficiency,” “behavioral modification,” or “control,” the question is: “Should it be?” Not exclusively or even primarily, according to Combs’ point of view.

This booklet is a statement of perspective. The Association for Supervision and Curriculum Development is both fortunate and proud to have a person like Art Combs as a part of the organization. More important, however, is the fact that he has shared his thoughtful, sensitive insights with us about a crucial issue in American education today. In the persisting discussions about accountability and behavioral objectives, he presents “another point of view.” A view which is concerned with people and not with things. A perspective which focuses on growth rather than restraint; human potentialities broadly conceived rather than human attainments very narrowly defined. I commend it to your attention.
Educational Accountability:
Beyond Behavioral Objectives

As the nation struggles to update its educational system, educators everywhere are being asked to stand accountable for the immense expenditures of human and financial resources being used for education. Who in his right mind can really oppose the idea of accountability? That is like being against motherhood. Every institution must be held accountable, and our schools are no exception. It is possible, however, that the means we choose to achieve accountability may boomerang to destroy or impede the goals we seek so that we end by “losing on the bananas what we made on the oranges.”

Just as the production of a truly healthy person requires a balanced diet, so, too, the approaches we take to accountability must provide a balanced perspective for improving the health of education. Too much, even of a good thing, can destroy prime objectives. We cannot afford to let a preoccupation with one or another system distort our overall goals. Yet, that is precisely what is currently happening as we pour vast sums of money and the time and energies of thousands of persons into the behavioral objectives-performance criteria concept for achieving accountability.

The behavioral objectives approach is not wrong. It would be easier to deal with if it were. The danger lies in that it is partly right, for in the realm of human affairs, nothing is more dangerous than a partly right idea. Partly right ideas provide partial solutions and so encourage us to continue our efforts to solve our problems along the same paths we have begun in the vain hope that if we can only do this more often, more intensely, or more universally, surely we must finally arrive at perfect solutions.

The behavioral objectives approach is like that. It does, indeed, have limited value and often works quite effectively when applied to the acquisition of precisely defined skills. It thus has an important
EDUCATIONAL ACCOUNTABILITY:

place in a system of accountability. Unfortunately, behavioral objectives also have such a logical, tangible quality that they are likely to create illusions of accuracy and efficiency far beyond the assistance they can actually deliver. As the sole or primary means for assessing educational outcomes, they leave very much to be desired.

A truly comprehensive approach to accountability must take into consideration all aspects affecting the outcomes of schooling, using each for what it can contribute to the total picture, with full recognition that all are related and all are required. At this point, at least five major problems must be considered in thinking about educational accountability. They are problems of:

- **Skills and Behavioral Objectives**
- **Intelligence and Holistic Behavior**
- **The Nature of Learning and the Causes of Behavior**
- **Humanistic Goals of Education**
- **Professional Accountability.**

It is my intent in this booklet to explore some of the issues with respect to each of these vital questions. I am very deeply disturbed at what is happening to education as a consequence of our current preoccupation with the behavioral objectives approach, and I hope this discussion may contribute to more realistic perspectives on the questions of accountability.

**Some General Comments About Methods of Assessment**

In any approach to educational accountability it must be understood that whatever methods of assessment are adopted have inevitable effects upon the educational settings in which they are employed. Some of these effects are quite direct, related to what the method purports to measure. Others are concomitant effects influencing educational practices in more or less subtle ways. Such side effects cannot be ignored. They must be clearly perceived and taken into account in the design of accountability models lest the cure turn out to be worse than the disease it was designed to correct. To avoid such a pitfall at least four important questions must be considered in the selection of assessment techniques:

1. *Are the objectives to be measured the truly important ones?* No matter how reliable the instrument or careful its use,
it cannot correct for inappropriate or inadequate goals. It is currently fashionable, for example, to employ various “systems” approaches for assessing educational outcomes. Systems approaches, however, are not “good” or “right” in themselves. They are only methods of assuring the achievement of whatever objectives the user wishes to reach. They do not distinguish between good and bad objectives, but only provide a disciplined procedure for making sure of reaching them. Applied to inadequate, inappropriate objectives the net effect may only be to guarantee that errors will be colossal.

2. Is the technique of assessment the most efficient means of determining the achievement of the desired objectives? Assessment techniques are by no means equally efficient. Whatever the method employed, it should provide results in the most accurate and expeditious fashion possible with a minimum amount of disruption to the overall goals of the educational process. Efficient devices must stand the test, not only of reliability and validity, but also of dispatch, simplicity, ease of administration, and the like.

3. What is the effect of the assessment technique on its user? Whatever methods the teacher employs necessarily modify his behavior. This also holds true for methods of achieving accountability. Techniques used to evaluate progress toward achievement of goals, in themselves, have the effect of focusing teachers’ attention, determining purposes, and influencing directions for action. These effects are inevitable. They cannot be ignored simply because they are inconvenient. They must be taken into account in the selection of assessment techniques. Means of assessment which fence teachers in, destroy initiative, or create debilitating anxieties may prove to be too great a price to pay.

4. What is the effect of accountability practices on the student? Assessment techniques do not only measure learning; they also affect it. How students perceive assessment devices and what they learn from the employment of such devices must be matters of vital concern in the selection of evaluative instruments. Anyone who has ever observed how students react to different kinds of examinations can attest to the varied effects they produce. Evaluative techniques which threaten, destroy self-esteem, distort perceptions about what is really important, or encourage negative, hostile behavior may be no bargain when assessed in terms of their impact on the recipients. Students learn from all their experiences,
EDUCATIONAL ACCOUNTABILITY:

including the experience of being evaluated; and those experiences, too, must be taken into account in determining accountability.

The reader may find it helpful to apply these questions to the various facets of accountability discussed in the sections to follow.

Skills and Behavioral Objectives

The Rationale for Behavioral Objectives

Critics of education have repeatedly complained of the "mindlessness" characteristic of much of what goes on in schools. They point out that teachers and administrators at every level continuously engage in activities for which they seem to have but the vaguest justifications. In all honesty, it must be admitted that the criticism is often well founded. Basically, the behavioral objectives-performance criteria approach is designed to counteract this unhappy state of affairs by requiring educators to define their objectives clearly in behavioral terms and establish performance criteria by which attainment can be judged. It is an attempt to get educators to approach their tasks in more businesslike ways by providing a disciplined procedure for establishing objectives and assessing the outcomes of teaching. It has the additional advantage of providing a ready-made procedure for the measurement of educational outcomes as defined by teachers themselves. The rationale seems utterly sound. This approach is also supported by traditional psychology and is consistent with industrial-scientific practices so much admired throughout our culture.

The press for behavioral objectives in American education grows, in part, out of orthodox, behavioristic psychology on which much of our educational practice has been predicated for several generations. This is the point of view for understanding human behavior most characteristic of American psychology for nearly a hundred years. Behavior, in this frame of reference, is understood as the response of the organism to the application of stimuli. Change in behavior is brought about through the manipulation of stimuli to produce desired responses. These concepts have been with us so long they have entered the public domain and are common knowledge to almost everyone.

The basic principle of "conditioning" is familiar to most Americans as illustrated in the historic experiments of Ivan Pavlov. Their most recent extension in scientific literature is found in the
work of B. F. Skinner and of a whole group of psychologists concerned with "behavior modification." In one or another of its numerous variations, this is the point of view most American educators cut their teeth on. It is also the psychological frame of reference of most educational researchers, especially those involved in assessment and measurement of educational outcomes. The application of S-R psychology to educational problems leads naturally and inevitably to behavioral objectives and performance-based criteria as the proper road to accountability.

The goal of education everywhere must surely be "improved behavior" on the part of students. Logically, then, to improve education, it would seem, we need to determine the behaviors we wish to produce, activate the machinery to produce those behaviors, then test the product to determine if, indeed, the goals were achieved. The reasonableness of this procedure seems unassailable. It is logical, straightforward, and objective. It is the accustomed technique we use for the solution of many of the problems we confront in our daily lives. It is also consistent with the "scientific method" we worship everywhere in our culture and with the hard-nosed assembly-line procedures which have made our industries "models of production." It may be observed in its highest development in modern managerial techniques such as "systems analysis," "PERTing," "PPBS programming," "computer-controlled production," and many others. The success of these schemes for increasing productivity in industry raises the hope in the minds of many that they will have equally salutary effects applied to education. As a consequence, we are currently in the grip of tremendous efforts to industrialize every aspect of the educational scene.

In view of all this, there is small wonder that the behavioral objectives approach to educational problems should be so highly regarded and placed in operation with such large expectations. It seems so very logical that it must surely be right for education. Unfortunately, as Earl Kelley once said, "Logic is often only a systematic way of arriving at the wrong answers!" and so it seems to be in this instance.

The behavioristic approach to teaching and learning is essentially a closed system. Ends are prescribed in advance and the task of the teacher is to manipulate events in such fashion as to bring students, one way or another, to those predetermined goals. In the most extreme forms, teachers are required to set forth their objec-

tives in precise behavioral terms, stating in advance the kinds of performance they expect to obtain as evidence of attainment of their objectives. Such an approach can sometimes serve us well. It makes its greatest contribution in the teaching of precisely defined skills such as reading, writing, and arithmetic, or in the production of clearly defined, uncomplicated behavior.

Applied to much more complex functions, the direction provided by the behavioristic approach has proven far less satisfactory. Blind devotion to S-R forms of psychology has even resulted, on occasion, in practices downright destructive to the very goals we have sought. There can be no doubt that this theoretical framework is highly useful where goals can be explicitly stated in precisely defined behavioral objectives. As the goals of education become increasingly complex and individualized, however, the adequacy of this frame of reference as a primary guide to practice becomes more and more doubtful.

The task of our schools must extend far beyond basic skills. We live in a complex world. Two facts alone make the highly specific behavioral objectives approach inadequate for modern education. One of these is the information explosion, which has vastly increased the sheer volume of information as to preclude any possibility that we can ever again hope to construct a common curriculum for everyone. Once it was possible, but no more. Our world is immensely complex, and the kinds of persons we need to keep it running must be so capable in so many divergent ways that a common schooling precisely defined in advance would fail all of us. Even if this were not so, the second fact, namely, the rapidity of change, would make the possibilities of forecasting "right" behaviors for tomorrow's youth ridiculous. Today's solutions will be obsolete tomorrow, and the pace of change grows ever faster and faster.

Some Hazards of the Behavioral Approach

In light of these events, it is apparent that behavioral objectives approaches to accountability are applicable only to the simplest and most primitive aspects of what is expected of modern education. Applied to the problems for which they are appropriate, behavioral objectives have important contributions to make. Applied without clear understanding of their limitations, the effects on our educational system can be wasteful and inefficient—even, on occasion, destructive to the very ends we seek.
A Symptomatic Approach. A behavioral objectives approach is essentially a symptomatic approach to behavior change. The behavior of an individual at any moment, it must be understood, is not cause; it is result. The behavior one observes at any instant is a symptom of what is going on inside the individual. According to perceptual psychology, the way a person behaves at any moment is a product of how things seem to him at that instant. People behave according to their perceptions of themselves and the world they are involved in. Concentrating attention, therefore, on behavior is to deal with it "after the fact," at the end of the process rather than at its origin. Thus, to attempt to change behavior by concentrating on the behavior itself is to deal with symptoms, and is likely to be no more satisfying than going to a doctor who might mistakenly do nothing but deal with symptoms while ignoring the causes of illness.

Failure to understand this symptomatic character of behavior has for generations frustrated the efforts of educators to deal with many problems. It makes a great deal of difference what a teacher believes is the important thing to look for in working with children. If his attention is riveted on the child's behavior and the necessity to change it, the techniques he will almost certainly employ will be managerial attempts to control and direct behavior. Since behavior is only symptom, such efforts to control and direct may have to be repeated day after day after day because nothing has been done to deal with the causes of the behavior under question. Techniques of accountability which focus teachers' attention upon the behavior of children may thus be teaching them to look in the wrong place to effect important changes.

Many persons assume that the way to get an individual to change his behavior is just to get him to concentrate upon it. Unfortunately, this view is also inaccurate. People who try to change their behavior directly by concentrating on it can only do so by "acting it." Failure to understand this implication of the symptomatic character of behavior has wreaked havoc with our attempts to deal with teacher education. For generations we have tried to teach teachers how to teach, showing them the "right" or "proper" ways to behave in the classroom. When methods of teaching did not fit the teacher's personal organization, he could only put them into effect by acting them, that is to say, by putting them on.

Yet changing behavior by acting it is only effective so long as one can keep his mind on what he is doing. This is almost impossible in the ordinary classroom, wherein thousands of dis-
tractions are continually occurring to take one's mind off what he is doing. When this happens, the behavior the teacher was trying to act is no longer sustained and falls of its own weight. A young teacher observing this fact may then conclude that what he was taught in the teachers college is "for the birds." And other teachers around him who have already been through this process are quick to tell him, "Wise up, friend! That's what we've been trying to tell you!" Important permanent changes in behavior are unlikely to be brought about by concentrating on symptoms; change must occur in causes. We will return to this problem later in this booklet.

A Closed System of Thinking. The behavioral objectives approach is a closed system of thinking. It demands that ends be defined in advance. This tends to place a straitjacket on teachers and students alike and makes the learning situation a search for "right" answers. Preoccupation in our schools with the necessity for being right has already done much damage. It discourages innovation, stifles creativity, and makes the classroom a dull, conforming place where people are learning right answers to problems they do not yet have.

The closed system of thinking also leads directly to a "great man" philosophy for education; someone must know where the people should go so we can set up the machinery to get them there! Surely this is a strange philosophy for schools in a democratic society! In a closed system, teachers must be all-knowing fountainheads of knowledge and information. There is no room to be wrong. Teachers must be expert diagnosticians and psychologists capable of dealing with literally thousands of contingencies. Even clinical psychologists who spend full time being diagnosticians find this difficult enough. A closed system of thinking also makes the teacher responsible for whatever students do, a terrible burden to place upon teachers.

Students taught in closed systems are very likely to feel trapped, caught in a mesh over which they have no control. Having no part in the determination of ends, they are also likely to feel no commitment to them. Educational processes come to be seen as irrelevant, and teachers are all too likely to be regarded as "the enemy" and the system as something to be sabotaged at every opportunity.

For two generations educational leaders have pleaded the case for open systems of thinking as models for American education. What an anomaly that schools in our democratic society should
BEYOND BEHAVIORAL OBJECTIVES

currently be going all out for a closed system and the application of industrial thinking to school problems. It may be objected that all this cannot be laid at the door of behavioral objectives and, of course, that is true. Yet such a frame of reference for dealing with our educational problems can certainly exacerbate a situation already bad enough. If we do not maintain a balanced perspective, the net effect of the addition of the behavioral objectives movement to the already sick classroom could set us back several generations or make our schools so totally irrelevant and dehumanized that our citizens will decide to give them up altogether.

**Distorting the Thrust of Education.** While behavioral objectives are useful in the achievement of specific skills, they do not lend themselves well to more general objectives. To achieve the precision desired for effective use, behavioral objectives must customarily be defined with greater and greater specificity. As a consequence, teachers required to use this approach are continuously exhorted to “be specific,” to “state your objectives precisely,” and to “tell exactly what behavior you expect to produce.” Such directives narrow the aims and purposes of teaching to ever smaller and smaller units capable of simple measurement and so contribute further to the terrible dehumanization already rife throughout our educational system. By concentrating attention on specific rather than general goals of the educational process, the major thrust of the entire system tends to be distorted as minor, rather than major, goals take precedence in the classroom. Such an approach has the effect of determining our educational goals by default as it decides philosophical objectives without addressing itself to those issues.

The resulting distortion is further compounded by the fact that behavioral objectives are likely to be determined by the nature of the measuring instruments available. Ideally, objectives should be established and methods of measurement then found or invented to test them. Quite the reverse too often is the case as objectives are formulated in terms of instruments which are readily at hand while matters for which there are no existing instruments are simply ignored altogether. In this way the overall goals of education become twisted to concentrate upon the production of those kinds of behaviors we know how to measure, generally cognitive and physical skills, which can be measured most successfully and precisely. This has the effect of contributing further to the dehumanizing influence currently pervading so much of our educational practice.
Preoccupation with precise behavioral objectives also makes classroom practices irrelevant to the needs of students. The effect is greatly increased by the widespread attempts to apply the industrial model to educational problems. The dehumanizing effects of many of these procedures are incalculable. We should have expected the reactions we are getting. The same things happened in industry. When management learned to apply “businesslike” systematic production techniques to industrial problems, workers felt dehumanized, caught in the impersonal machinery. In self-defense they formed unions and fought the system—a pattern remarkably similar to what is currently happening in education! The same depersonalization and alienation in our schools find expression in student revolts and widespread opting out, coping out, or dropping out of the system.

*Effects on Teacher Morale.* One of the saddest aspects of the current press for behavioral objectives is the contribution it makes to the further demoralization of teachers. Citizens these days are demanding change in education and well they might. Such change is long overdue. Unhappily, pressures can also destroy morale. The demands we are currently making on teachers are bewildering beyond belief. Hundreds of innovations are being ballyhooed by educators, administrators, parents, industry, government. Problems of civil rights, desegregation, tightening budgets, and more and more pupils on top of these expectations make the task overwhelming.

Add to this burden the continuous barrage of criticism teachers get from all sides and it is no wonder that many become dispirited and go about their tasks doggedly plugging through one day after another, or drop out of the profession at the earliest opportunity. A characteristic response to too many demands is to close them out of consciousness and confine one’s self to only those details he can do mechanically without the necessity for thought. One needs but sit in on exit interviews with teachers leaving the system to understand how overwhelming the current demoralization has become.

Teachers already have too much to cope with. And now in many school systems it is proposed that they must add behavioral objectives to their already heavy loads. Some state departments of education are busily at work compiling thousands of behavioral objectives which teachers will be expected to know and seek for the children they work with, a process made even more frantic by
federal agencies which make behavioral objectives an absolute requirement for educational research or program support. The madness has even spread to some teachers colleges, where teachers currently in training are expected to check themselves out against thousands of teacher “competencies,” another name for behavioral objectives.

Many legislators, national funding organizations, state and local school boards, administrators, and supervisors today are caught up in the belief that behavioral objectives will make a businesslike operation out of our public schools and surely save us all! Unfortunately, what teachers need today, in my opinion, is not more pressure but more time to work with pupils; not more complication but greater simplification. They need reassurance, security, and a chance to develop their own unique styles. Frightened, harried people cannot be creative or innovative.

Persons concerned with accountability must, themselves, be held accountable for the effects their current demands are having upon our educational system. Unthinking advocacy of behavioral objectives, no matter how well intended, which ends only in harassing teachers into further immobility and demoralization will defeat itself. Worse still, such advocacy will, in this writer's opinion, do great harm to a whole generation of students.

Intelligence and Holistic Behavior

The world we live in is so infinitely complicated that we must have a vast and continuous supply of well-informed specialists just to keep it working. It is also the most interdependent society the earth has ever known. We are so completely dependent upon the work and goodwill of other people that few of us could live more than a few days in isolation. The production of ever increasing numbers of intelligent persons is no longer a luxury, it is an absolute necessity for the kind of world we have created. Education, if it is to accomplish its purpose, must produce that kind of people. Whatever is done in the name of accountability must contribute maximally to the fulfillment of that charge.

By intelligent behavior I mean effective, efficient, problem-solving action contributing to the fulfillment of an individual's own and society's needs. A genius has been described as “a guy who gets into trouble for the sheer joy of getting out again!” Problem-solving behavior is not fixed and predetermined. Quite the contrary, it is adaptable and appropriate to the demands of the circumstances
confronted. Such behavior calls for individuals who are, of course, well informed, but who are also creative, flexible, open to experience, responsible for themselves and others, and guided by positive goals and purposes. A system of accountability completely dependent upon prior definition of behavioral outcomes would produce not intelligent persons but automatons. Intelligent behavior is produced by successful experience in problem solving and calls for educational experience extending far beyond the learning of precisely defined skills. Whatever is done in the name of accountability must contribute to the effective production of intelligent behavior as a primary goal of modern education.

Assessing Intelligent Behavior—a Holistic Problem

The criteria for intelligent behavior are not specific right answers but effective solutions to problems. Since good solutions must be appropriate to the nature and conditions of problems as they are met, these cannot be defined precisely in advance. As a consequence, behavioral manifestations must generally be examined in holistic or global terms. The general tendency of the behavioral objectives approach is to attempt to break behavior down into smaller and smaller fragments capable of more and more precise measurement. This attempt must be resisted, for the process of fractionation destroys the very goals sought. Intelligent behavior is a gestalt—an intricate pattern of parts in which genius resides, as in a symphony, not in the notes but in the composition, in the way the elements are put together. Such behavior is expressed in action in global, holistic terms. That fact cannot be ignored just because it is inconvenient. If intelligence is exhibited in holistic behavior, we shall simply have to define our objectives in these terms and, thereafter, find ways to assess it. Measuring what we know how to measure is no satisfactory substitute for measuring what we need to measure.

The crucial test of intelligent behavior must be made when the individual is acting on his own. Intelligent behavior is spontaneous, creative activity arising as a consequence of confrontation with problems. It must, therefore, be assessed when the individual is face to face with the problem where he is operating as a free agent outside the restraints of the educational setting. This raises a difficult problem for assessment; for the farther we are away from the learning activity to be assessed, the less we can have any assurance it was that activity which made the difference.
It is a basic psychological principle that, the older a person gets, the larger and larger is the world to which he is responding and the less and less it becomes possible to isolate the precise experiences which produce a specific reaction. The world of an infant is very small, and his parents are the most crucial items in it. The older the child gets, however, the larger and larger is the world to which he is responding and the less it is possible for us to be sure of the precise events which have caused his behavior.

We certainly cannot make the assumption of the first-grade teacher who once told me, "I love to teach first grade because the children come to you not knowing a thing, not a thing—and by the end of the year you can see what you have done!" It seems clear that in the present state of our assessment procedures we are not likely to be able to isolate with any degree of assurance the effect of a specific current activity on later global behavior. Educators will simply have to live with the fact that their most important objectives may not lend themselves to that kind of specificity.

While it is not possible for us to claim with certainty increases in intelligent behavior in our students years from now, it is possible for us to deal with these questions on a much more immediate basis. It is still true that the best guarantee we have that a person will behave intelligently in the future is that he is doing so in the now. It is possible to assess whether or not a student is behaving intelligently in the present. It is also possible to determine whether he is behaving more intelligently at the end of the year than he did at the beginning. What is required is an interest in the problem and the allocation of financial and human resources to the development of assessment devices in this area. Tremendous sums are currently being allocated all over the United States to the problems of accountability. The diversion of some of these funds to the problem of assessing intelligent behavior in the now would hardly be noticed and holds promise of returning tremendous dividends.

A second roadblock to the assessment of intelligent behavior lies in our current preoccupation with purely objective measurements of these events. This hang-up in our thinking prevents us from dealing with our most important educational objectives. Intelligent behavior is global, personal behavior and does not lend itself well to standardization techniques or mass testing programs. However, the capacity to arrive at effective, efficient solutions satisfactory both to oneself and the world in which one lives can be assessed, but not by mass or standardized techniques. Such assessment calls for human judgment, a characteristic currently
regarded with suspicion and disdain by accountability "experts." What a pity! Human judgment is what we must use at every phase of our normal existence. The improvement of human judgment is what education is all about. The very essence of good teaching is the intelligent, creative use of human judgment.

The objective methods of science provide us with important checks on human observation and with logical presumption of greater accuracy when we use such checks. Yet human judgment is all we have to depend upon in the absence of objective devices. We cannot shrink from confronting our pressing problems for lack of precision tools. We must do what we can with what we have. Persons who never used judgment would be forever confined to what was immediately palpable and observable. Judgment frees us to go beyond mere observation. To reject it as a tool for assessment is to limit ourselves to the least important aspects of our educational effort and so to assure the increasing irrelevance of a system already desperately ill of that disease.

The belief that judgment is somehow unscientific is an illusion. All science, of whatever description, is dependent upon human judgment. Science itself is merely a device to refine and control human judgment. The goal is not its elimination but its effective and efficient use. Judgment requires the use of the "observer as instrument" and, of course, this instrument, like any other in scientific use, must be properly calibrated to make sure its readings are as reliable as we can possibly make them. That can be done. The physical scientist relies upon one or more of six important tests of validity:

1. Feelings of subjective certainty
2. Conformity with known facts
3. Mental manipulation
4. Predictive power
5. Social agreement
6. Internal consistency.2

All sciences, of whatever sort, are dependent upon the use of these criteria. These are equally applicable to the problems of educational judgment. Human judgments can be made reliable and useful devices for effective assessment.

Psychologists, administrators, and educational researchers

have committed great injury to our educational effort by unreasonable demands for objectivity. By their continuous denial of the value of teachers' judgments, they have seriously damaged the morale of the profession by undermining the beliefs of teachers in their own experience and capacities for observation and evaluation. The best example is to be seen in the slavish dependence of teachers upon test results for the determination of student grades in preference to their own observations of student performance.

Despite the continuous pressure for objectivity by “experts,” our research at the University of Florida on good and poor teachers found objectivity to be correlated negatively with effectiveness. Education is a subjective institution, and educators must depend on judgment. The assessment of intelligent behavior requires somebody's judgment concerning the effectiveness, efficiency, and responsibility of an individual's performance. There is at this time no adequate substitute for human judgment in making such assessments. We have no alternative. Educators cannot abrogate the responsibility. They must accept it, live with it, and learn to do it well and reliably.

Implications for Accountability

The degree to which intelligent behavior now is likely to correlate with intelligent behavior in the future will be dependent upon the success of our schoolrooms in dealing with real problems and real people. The assessment of intelligent behavior with respect to problems that do not matter is hardly worth the effort. While there is probably some small correlation between a student's learning to play the academic game skillfully and his ability to solve problems in the real world, the correlation is probably low. The accuracy of our assessment attempts will increase as we succeed in making the classroom and the school a problem-solving center where the problems being solved are real ones in the lives of students. This is not an impossible task. It requires that our educational settings be relevant to the student's world and to his needs and purposes in that world.

If our educational system is to produce persons capable of behaving more intelligently, its classrooms and procedures must mirror that objective. Classroom activities must be problem-

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EDUCATIONAL ACCOUNTABILITY:

centered and oriented toward student problems. They must also
free students to behave in unique and creative ways in finding their
own solutions to real problems. Procedures must "turn students on"
and encourage involvement and commitment. This means teachers
must be oriented to these ends. Since people regard as important
those things for which they are held accountable, whatever is done
in the name of accountability must itself be examined to determine
whether, indeed, it leads teachers to value intelligent behavior
and the kinds of curriculum, classrooms, and relationships likely
to produce it.

A few years ago I asked a group of students to tell me what
kept them from getting committed in school. Here are some of
the things they named:

Nobody thinks our problems are important.
Nobody has any respect for our beliefs.
Teachers don't trust kids.
All they want is conformity.
They feed us a "Pablum" diet—it's all chewed over and there is
nothing good left in it.
Everyone is afraid to let us try.
Nobody cares about students as people.
It's details, details, details.
Or grades, grades, grades, as though they mattered.
You can't question anything.
The only good ideas they think are all in the books.
The things worth getting committed to don't get you ahead in school!

If these barriers truly prevent student involvement, they also
must be applied as yardsticks to whatever is done in the name of
accountability. We need to ask, for example, "Does this or that
technique eliminate such barriers or contribute further to them?"
Applying such criteria to some practices currently advocated sug-
gests they may well be self-defeating. What happens in classrooms
is crucial for education. Whatever interferes with the optimum
dynamics for learning, no matter how desirable it may appear in
theoretical or logical terms, must be examined critically in the
light of larger objectives.

It seems very clear to me that any approach to accountability
must include broad, holistic behavioral objectives. Such a pro-
dure, however, is directly at odds with the specificity and precision
demanded by most persons operating in the behavioral objectives,
BEYOND BEHAVIORAL OBJECTIVES  17

performance-based criteria persuasion. Research on good and poor teachers carried out at the University of Florida, mentioned earlier, found good teachers characterized by broad rather than narrow purposes, seeking to free their students rather than to control them, and concerned with processes rather than ends in their teaching. Such characteristics are much more likely to be encouraged by objectives stated in the broad, holistic terms required for intelligent behavior than in highly specific, atomistic ones. Narrow specificity and broad generality are not synonymous. More often than not, these qualities are likely to be mutually exclusive.

If intelligent behavior is to be truly an important objective, it seems to me we have no alternative but to push for such goals and accept the judgmental criteria which they require at this stage in our assessment skills. This is not easy, however. In the eyes of the casual observer, the illusion of precision and exactitude obtained by the measurement of atomistic details is impressive and carries a feeling of accuracy, while holistic goals and judgmental assessments seem vague, haphazard, and inaccurate. This leaves the holistically-oriented worker in the embarrassing position of being required continually to explain his position in ways that often come off to his listeners as apologetic or as fuzzy minded. That is a state of affairs we shall have to live with for a long time to come. The knowledge and expertise of any professional worker often place him in positions where the complex understandings of his profession cannot always be simply translated into language which laymen can quickly grasp. The fact that complex goals and procedures cannot be simply stated is no excuse for giving them up. There are times when educators, like other professional persons, will not be understood or loved by the public. That is part of the price we pay for being professionals.

The Nature of Learning and the Causes of Behavior

The Causes of Behavior

From the preceding discussion, it is apparent that the attempt to measure the outcomes of education in behavioral terms leaves us on the horns of a dilemma. Assessment of specific behaviors concentrates on the least important aspects of schooling and runs the risk of preoccupation with the wrong goals. Assessment of global behavior, on the other hand, leaves us without assurance that
it was the student's schooling that produced the changes in behavior. Fortunately, we do not have to remain content with these conditions.

There are other approaches to accountability on which we can rely for further evidence of educational outcomes. One of these concentrates attention on causes of behavior rather than on behavior itself. This approach requires recognition of the symptomatic character of behavior, the understanding that, whatever the behavior observed, it is result, not cause. Behavior, in and of itself, is nothing. It has significance only in terms of its meaning to the behaver and to the receiver.

In the eyes of the behaver, what he does is always done for a purpose, to achieve some end, be it as simple as bending over to get a drink from a water fountain or as complex as going to college to become an engineer. In terms of perceptual psychology, the behavior of an individual is always the result of the particular field of meanings (called the perceptual field) existing for him at the instant of his behavior. These perceptions include not only the events the individual is confronted with in the world. More important, they include such meanings as the individual's beliefs, values, concepts, understandings, perceptions, hopes, desires, and many more.

Whatever a person's behavior, it is always a function of the personal meanings existing for him at the moment of action—especially, how he sees himself, how he sees the world in which he is moving, and the purposes he has in mind at that moment. Thus, at the moment of writing this material I see myself as a concerned psychologist-educator addressing an audience of persons equally concerned about education. My purpose, of course, is to influence their thinking about the problem of accountability. Each of my readers is also behaving in terms of his own perceptions of himself, his world, and his purposes as he reads this material.

Perceptions produce behavior, but this relationship is not one to one. A given set of perceptions may produce many varieties of behavior. With a little imagination, for example, any child who wants to upset a teacher can find myriad ways to do so. Any single behavior we might observe him engaging in could have been produced by many different kinds of internal perceptions. Changing the child's behavior without changing his perceptions is unlikely to produce any permanent variation in his behavior. On the other

hand, changes in his perception must almost certainly result in some different kind of action.

To attempt to catalog or predict all the behaviors possible to an individual is unnecessary if one understands the perceptions of the persons he is dealing with. If I know, for example, that a person's perceptions of me are basically good and his desires are within reason, I do not then need to know precisely what he will do. I can rest content that what he will do will be appropriate. Actually, this is what all of us do in predicting the behavior of our friends. Over a period of time we get to know them so well that their behavior no longer surprises us. We say, "He would!" by which we mean that we understand so well how he sees himself, his world, and his purposes that we can predict in advance the global kinds of behaviors he is likely to engage in.

For the receiver of behavior, too, the crucial problem is not the behavior itself but what it means to the person perceiving it. If you perceive my behavior toward you as insulting, it does not matter what the behavior really was or even what I intended it to be. If you feel insulted, that is "the fact" for you. Such misperceptions of behavior are responsible for most breakdowns in human communication. Any behavior may have vast numbers of meanings to the recipient.

What behavior seems to be to the outside observer may be purely an illusion. It is currently fashionable to attempt to define the teaching act by cataloging behaviors of teachers as they are observed in the classroom. The results of such efforts, however, may be to provide us with a distorted picture of what is really going on. For example, in a study of good teachers done by Marie Hughes,5 it was found that the behavior of her sample of good teachers was "controlling and directing" most of the time. Actually, an examination of the behavior of these teachers in terms of meaning makes it clear that the behavior of these good teachers was not that at all. For example, a teacher walking down the aisle and stopping to correct a child's errors says to the child, "Not like that, Jimmy. Try it like this, son." Such behavior would be scored by the observer as controlling and directing. In the teacher's view it was assisting and helping, while from the point of view of the child to whom it happened his teacher's behavior was aiding and facilitating, perhaps even loving!

20 EDUCATIONAL ACCOUNTABILITY:

How a person behaves at any instant is a function of what is going on inside him—especially his beliefs, feelings, values, attitudes, personal meanings, purposes, and goals. Permanent change in behavior is only likely to occur when these causative factors within the individual are changed. Concentrating on behavior thus puts attention on the wrong thing. Except in the case of comparatively simple skills, it is an inefficient road to behavior change. A given perception in the student may lead to hundreds of behavioral expressions. Or, a given behavior may be the product of a vast number of personal perceptions.

Change in behavior with no change in perception is unlikely to remain very long. On the other hand, a change in perception may result in many behavior changes. To be sure, sometimes when a behavior change has been manipulated, perception also changes and the behavior may become permanent. However, that is a roundabout, haphazard approach to changing behavior, like taking an unnecessary detour. Counselors and psychotherapists have long since learned to ignore most of the behavior of their clients while they concentrate on the clients' feelings, attitudes, beliefs, and personal meanings, knowing that, when these change, changes in behavior will automatically follow. The principle is no less true in the classroom.

Teachers preoccupied with behavior change may make themselves inefficient by looking in the wrong places. Accountability efforts directed toward causes of behavior are likely to be more efficient and at the same time avoid some of the hazards attached to a strictly behavioral approach to the problem. To follow this more fruitful approach requires that teachers, administrators, and their evaluators concern themselves with the meaning aspects of learning.

Learning as Personal Meaning

A major error in much of our past thinking about learning has been to regard it as a product, a thing produced by various sorts of manipulation. This is the accustomed frame of reference, growing out of stimulus-response forms of psychology, which has led most behavioral objectives enthusiasts to regard learning not only as a product, but a product capable of precise definition in behavioral terms. More recently, humanistic psychologists have taken a different slant. They regard learning not as product, but as process, the personal discovery by the learner of the special mean-
ing of events for him. The heart of the learning process is change in meaning, and when this occurs the person will find his own best ways of expressing it. Personal meanings in a humanist system are the causes of behavior; and it is these, the humanists insist, which must be made the primary objective of education.

The perceptual view of learning holds that the process always has two aspects: (a) the provision of new information or experience, and (b) the personal discovery by the learner of its personal meaning for him. Currently, our educational system is preoccupied with the information half of this equation. For generations this has been regarded as the primary task of the teacher. It is also the aspect of the learning equation in which we are already immensely expert. We have gathered information in libraries and in the minds of intelligent teachers, and we know very well how to transmit this information to others. We have been doing it for generations; and now, with our fancy new hardware, electronic gear, audiovisual techniques, and the like, we are able to provide people with information faster and more furiously than ever before in history.

Whenever we want to change education, we usually end by providing people with more and more information. So our approach to curricular reforms is generally to call for more math, more science, more physical education, more driver's training, more languages in the early grades, more testing and evaluation, more, more, more. The information aspect of learning also lends itself well to manipulation by industrial techniques, and we are currently attempting to apply these techniques to the educational process as never before. Unfortunately, the information half of the learning equation is not where we are sick. The dropout is not a dropout because he was not told. We told him. The problem is he never discovered the personal meaning of what he was told! Our failures today are an outgrowth of our failure to help students discover personal meaning. One needs but listen to them complain of the irrelevance of much of what they are doing or to observe the numbers of them who are opting out, coping out, and dropping out to understand how far we have drifted from the truly important goals.

It should not be supposed that the emphasis I have placed upon personal meaning in this discussion refers only to affective, humane goals of education. A stress upon personal meaning is by no means anti-intellectual or anti-cognitive. Quite the contrary. The point is that no information of whatever variety will affect behavior until the individual has discovered its personal meaning for him.
This law of learning applies to all learning, including the acquisition of skills, the learning of scientific facts, or the times and places of the battles of the Civil War. The most objective scientist does not act upon his information unless he believes it is correct, is appropriate to the problem he is confronting, and fits his own personal need—all that is a question of personal meaning. Every teacher is keenly aware of how little relationship exists between what the student is able to put down on examinations and the use of that information in free problem-solving situations where it is called for. Attempts at curriculum reform in such areas as mathematics, science, reading, and language studies already stress the importance of understanding principles, interrelationships, and personal application of knowledge. This is in line with the basic postulate of learning previously stated.

If learning is a function of the personal discovery of meaning, that principle applies to all learning, of whatever variety, and cannot be swept under the rug because it is inconvenient for us to deal with it. Behavioral objectives enthusiasts have rightly pointed out that "mere knowing" is insufficient to assure the achievement of educational goals. They insist that the crucial test of information is whether it will be manifest in behavior. The point I am making here is that whether it will be manifest in behavior will be dependent upon the student's discovery of the personal meaning of whatever information he is exposed to. It is quite possible for learning to occur with no externally observable change in behavior whatever. For example, a student holding the belief that he "ought to be polite to a black man" may behave politely. A change in his belief to "Al Johnson is a nice person and I like him" will also result in polite behavior, but the latter belief is far more likely to result in permanent change in behavior than the former. A person who desires to harm another may be taught to "control himself"; a person who does not desire to harm another has no problem, and there is no necessity to teach him to control his behavior.

Meaning changes may also occur today and be expressed only much later in some form of appropriate action when the person is confronted with a problem to which that action is appropriate. The attempt to assess the outcomes of education solely in behavioral terms makes the error of treating learning as product rather than process and so concentrates efforts to influence it on ends rather than means. How much better to avoid these problems by assessment directly focused on meaning change.

The information aspect of education is the one most easy to
provide. It is the thing we already know how to do extremely well. Even as we have learned how to do it well, however, we are now being told that teachers as information providers are obsolete! It is pointed out to us that information can now be provided so much more effectively and efficiently by other means, that the teacher-as-information-provider is a horse and buggy concept in a jet age society. The proper dynamic for modern education must be personal meaning, and whatever accountability techniques we create must concentrate on that outcome. We will return to this point in the following section.

Humanistic Goals of Education

Self-Actualization—Primary Goal of Education

Modern education must produce far more than persons with cognitive skills. It must produce humane individuals, persons who can be relied upon to pull their own weight in our society, who can be counted upon to behave responsibly and cooperatively. We need good citizens, free of prejudice, concerned about their fellow citizens, loving, caring fathers and mothers, persons of goodwill whose values and purposes are positive, feeling persons with wants and desires likely to motivate them toward positive interactions. These are the things that make us human. Without them we are automatons, fair game for whatever crowd-swaying, stimulus-manipulating demagogue comes down the pike. The humane qualities are absolutely essential to our way of life—far more important, even, than the learning of reading, for example. We can live with a bad reader; a bigot is a danger to everyone.

Social scientists in recent years have given increasing thought to the problem of self-actualization. “What,” they ask, “does it mean for a person to be truly operating at the fullest extent of his possibilities?” The answers they find to these questions are helping us to understand what self-actualizing persons are like and how it is possible to produce them. These studies are in many ways among the most exciting currently occurring on the psychological scene. To this point, four basic qualities seem to be central to the dynamics of such personalities. Self-actualizing persons are:

1. Well informed
2. Possessed of positive self-concepts
3. Open to their experience, and
4. Possessed of deep feelings of identification with others.
Informed educators have taken their cues from this work. Self-actualization is not just a nice idea—whatever we decide is the nature of the fully functioning, self-actualizing person must also be the goal of education, as of every other institution for human welfare. The production of such persons is, after all, what it is all about. In 1962 one group of educators tackled the problem of trying to define what the basic principles of self-actualization might mean for education. This work has been published in the ASCD 1962 Yearbook entitled *Perceiving, Behaving, Becoming*, a volume which is among the most popular in educational history and which, though it is now ten years old, continues to be an educational best seller.

The authors of this book began with a series of papers by four outstanding psychologists who defined the nature of self-actualization. From that beginning the educators asked, "If these things are so, what does this mean for education?"

In the course of their examination they found innumerable aspects in the current educational scene which actually prevent the development of healthy personalities. They were also led in their discussions to point the way toward new objectives for education more likely to achieve the production of self-actualizing persons than those to which we have been accustomed.

Many people believe that there is no place in our educational structure for "affective" concerns. They ask, "Do you want education for intellect or adjustment?" As though it were necessary for us to make a choice between the production of smart psychotics and well-adjusted dopes! Affective, healing aspects of behavior are not something separate and apart from cognition. Modern psychologists tell us that affect or feeling is simply an artifact of the degree of personal relevance of the event perceived. We have no feeling about that which is of no concern to us. The greater the degree of personal relevance, the greater is the degree of feeling or affect or emotion which is likely to be experienced by the behaver. The attempt to rule out the humane aspects of life from the classroom is thus to make the classroom sterile. If affect has to do with relevance, then we are either going to have affective education or none at all. If the humane qualities we expect of education are important, they must be given their proper place in the perspective we take on accountability. We cannot afford to be

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so preoccupied with the cognitive, behavioral aspects that we later find we have "thrown out the baby with the bath water."

Unfortunately, humane qualities are already relegated in our public schools to "general" objectives—which means they are generally ignored—while teachers concentrate their efforts on what they are going to be evaluated on. English teachers concentrate on English, coaches concentrate on winning football games, science teachers concentrate on getting students into national science competition, and elementary teachers are evaluated on how well children learn to read, write, and figure. But no one evaluates teachers on whether their students are becoming good citizens, learning to care for each other, work together, etc. Everyone knows that people tend to do those things they are being evaluated for. Indeed, it is an understanding of this fact that has brought about the pressures for accountability. If humane qualities are to be achieved, such qualities must be given front rank in importance and schools must be held accountable for their nurture.

If the four qualities of self-actualization previously mentioned are accurate, we need much more than behavioral objectives as criteria for their achievement. Such questions as a positive self-concept, openness to experience, and identification do not lend themselves to behavioral measurement. Aspects of self-actualization can be assessed, but rarely in precise behavioral terms. Indeed, the attempt to do so may even impede their effectual development. The humane qualities we seek in education, such as positive self-concepts, feelings of identification, responsibility, openness to experience, adaptability, creativity, effective human relationships are, like any other behavior, outcomes of personal meaning; and it is here that we need to look for answers to our problems of accountability.

The Assessment of Personal Meaning

To deal effectively with the internal qualities of personal meaning and the humane objectives of education, a new approach is needed. Called for is a psychology that differs from the limited concepts available to us in the various forms of S-R psychology with which we traditionally have lived. What is needed is a humanistic psychology expressly designed to deal with the human aspects of personality and behavior, a psychology which does not ignore the student's belief systems but makes them central to its concerns. Fortunately, such a psychology is already with us.
The past 30 years have seen the appearance of "humanistic" psychology on the American scene. This approach has a holistic character capable of dealing quite directly with many of the more general objectives of education. Psychologists attached to this new frame of reference call themselves by many names: self psychologists, transactionalists, existentialists, phenomenologists, perceptualists, and the like. By whatever name, however, these psychologists are concerned with more than the specific, precisely designed behaviors of individuals. They are deeply concerned with questions of values, human goals and aspirations, feelings, attitudes, hopes, meaning, and perceptions of self and the world. These are the qualities which make us human, and it is because of these concerns that this point of view has come to be known as the humanistic approach. Humanistic approaches to psychology, it should be clearly understood, do not deny the tenets of behavioral approaches. Quite the contrary, they include such approaches, but extend beyond them to deal with more holistic matters not readily treated in the older behavioral system. This is precisely what is needed in modern approaches to educational accountability.

The viewpoint of this booklet is that behavioral objectives provide too narrow a basis for proper assessment of educational outcomes, and our concepts of accountability must be expanded if they are properly to match the broadest goals and requirements for our educational system. Humanistic approaches to psychological thought provide us with theoretical guidelines to effective practice consistent with these broader goals. It is high time that these new conceptions be made an integral part of the training of educators and given wide dissemination throughout the profession. This booklet is not the proper vehicle for a detailed description of the humanistic position. Interested readers may find an introduction to this position in the work of such writers as Carl R. Rogers, A. W. Combs, D. L. Avila, and W. W. Purkey. Helping Relationships: Basic Concepts for the Helping Professions. Boston: Allyn and Bacon, Inc., 1971.

What is needed now is a systematic attempt to give principles and contributions of humanistic psychology wider understanding at every level of our educational structure. This is a point of view specifically designed to deal with the problems of personal meaning. As a consequence it is able to provide important guidelines for thinking about our broader objectives, for finding better ways to achieve them, and for assessing whether or not our educational processes have truly achieved their objectives.

If behavior is symptom and meaning is cause, then if we could somehow assess meaning we would not need to be so concerned about measurement of behavior. Meanings, however, lie inside persons and, at first glance, it would seem impossible to assess them. It is true that meanings cannot be observed directly, but neither can electricity, and we have managed to measure that pretty effectively by inference. The same thing works for personal meaning. While meanings cannot be read directly, they can be inferred by a process of “reading behavior backward.” If it is true that behavior is the product of perception, then it should be possible to observe a person’s behavior and infer the nature of the perceptions which produced it.

Actually, this is what all of us do in interpreting the behavior of those who are important to us. In our research at the University of Florida on the helping professions, we find it also the approach to students, patients, and clients which distinguishes effective counselors, teachers, nurses, professors, and Episcopal priests from ineffective ones. Such inferences are not made by seeking one-to-one concomitants. The process calls for a holistic rather than an atomistic approach to understanding human behavior. Instead of cataloging specific behaviors, the observer uses himself as an observation instrument and observes all he can by immersing himself in the situation. By a continuous process of observing, inferring, and testing his inferences over and over, he is able in time to arrive at accurate understandings of the peculiar meanings producing the behavior in the persons he is observing. Meanings can be assessed.

The problem is not one of learning to do something entirely new. It is a matter of learning to do what all of us already do occasionally with persons who are important to us. We have little

EDUCATIONAL ACCOUNTABILITY:

trouble being sensitive to and interpretive of meanings existing for those above us in the hierarchy, such as principals, supervisors, and superintendents. What is needed now is to learn to do these things more often, more precisely, and in more disciplined fashion with persons in positions subservient to us, such as students. These are skills that can be learned. Indeed, many fine teachers already have them.

The assessment of meaning has an additional advantage. It focuses the attention of educators on the causes of behavior directly. The attempt to catalog behaviors with too great specificity may actually take us further and further away from the basic meanings producing them. Assessing outcomes through global behavior is likely to be somewhat closer to the basic causes of behavior but may still be far less exact than we might desire. As a matter of fact, too much attention to the observation of specific behavior can seriously interfere with understanding the causes of behavior, by concentrating attention on symptoms rather than causes. Like hundreds of other teachers of "Human Growth and Development," I used to send my young teachers-in-training to observe the behavior of a child in the classroom, insisting that they should record precisely what the child did from moment to moment. These instructions were intended to discipline the student into being a careful observer.

This is still standard practice in many colleges of education. Unfortunately, what it does is to concentrate the student's attention on the behavior of the child instead of on the causes of that behavior. In recent years I have found it more helpful to send students into a classroom, not to observe it, but to participate in it. They are instructed to "get the feel" of the classroom. "See if you can figure out how the child is thinking and feeling about himself, his classmates, his teachers, the work of the school. See if you can figure out his purposes, what he is trying to do, then tell me what you saw that made you think your inference was accurate." This procedure concentrates the student's attention on making and supporting inferences about the causes of children's behavior rather than on simply observing the symptoms. I find that since we have adopted this system my students have become far more effective than previously.

If such procedures for assessing meaning seem imprecise and vague as we have described them here, they need not be. It is quite possible to make inferences with high degrees of accuracy and reliability by application of the usual tests for scientific credibility.
already mentioned in this booklet. Inferential techniques are already widely used in psychological research, especially in the study of such personal meanings as attitudes, beliefs, self-concept, and purposes. The assessment of meaning outcomes of education can be made with whatever degree of precision is desired, from informal observation to highly controlled and systematized procedures.

The exploration of highly personal meaning, of course, does not lend itself well to study by standardized techniques. There are, however, procedures in fairly wide use for the assessment of meanings of a more general sort. With a comparatively small diversion of funds and human talent currently assigned to behavioral approaches to the problem, many more could be developed within a comparatively short time. If the heart of learning is the personal discovery of meaning, the proper assessment of educational outcomes should be the most accurate possible understanding of the personal meanings being produced by the system. Use of behavioral objectives is a highly inaccurate approach to that problem. If the goals of accountability are to be achieved, we are going to have to find ways of assessing personal meaning more accurately and simply.

Traditional psychologists of S-R, behavioristic persuasion are often aghast at inferential procedures which seem to them to be grossly unscientific and subjective. Their commitment to the behavioristic approach to psychology makes it impossible for them to accept inferential techniques, even though these have long since been adopted in many of the physical sciences for solution to some of their knottiest problems. The formulation of inferences can be made highly accurate by use of the very same techniques as those used in any of the other sciences.

The attempt to approach accountability through assessment of personal meaning is not only likely to be more effective, it has additional advantages of great practical value in the classroom. This approach is far simpler for teachers to manage than are highly specific lists of behavioral objectives, because with such an approach there are fewer concepts to master. Attention can be given to basic principles rather than to limitless details. The teacher preoccupied with manipulating behavior is likely to find himself dealing with classroom problems through various forms of reward and punishment, or such controlling devices as force.

10 Allport, The Use of Personal Documents in Psychological Science, op. cit.
coercion, exhortation, or bribery. Such approaches are very likely to produce their own resistance in the students whose behavior he is attempting to change. It is a part of our American heritage to resist being managed, and it should not surprise us if such techniques call forth in students ingenious and creative devices for sabotaging the system.

The teacher who is concerned about personal meanings of students is much more likely to find that his relationships with students are warmer and more human. Human aspects are not rejected but actively sought and appreciated. Empathic teachers, honestly concerned with understanding how students think, feel, and perceive are far more likely than other teachers to be liked by their students, have less problems with motivation and discipline, and themselves more successful in carrying out their assigned tasks—to say nothing of being more relaxed and happy on the job.

A major objection to inferential approaches to the study of behavior proposed by behavior modification-performance criterion advocates is that inferences can only be made from behavior, and thus this approach is no different from the goals they seek. "We are willing," they say, "that you should make inferences about behavior if you wish, but what is the point? Why not simply observe behavior?" Of course it is true that humanists must begin their studies of student behavior from careful observation of it. Every psychologist, no matter what his allegiance, must begin from that base. A major point of this discussion, however, is that sole reliance on observation of behavior is but a symptomatic approach to assessing outcomes of teaching. Approaching accountability in that fashion thus concentrates attention on the wrong dynamic, and the attempt endlessly to catalog specific desired behaviors creates an unnecessary and complicating detour for understanding.

The holistic-inferential approach to assessment offers a much more direct and efficient approach to the causes of behavior. It does not attempt to itemize all behavior or gather it up in great masses. Instead, it uses the observer himself as an effective screen for observing those aspects of behavior providing the most efficient clues to the causes he is seeking to understand.

An analogy from mathematics may help us to understand these two different approaches. Arithmetic is a system of mathematics especially designed to deal with countable events, things which can be directly observed in units at a very primitive level. Algebra, on the other hand, is a more advanced system of mathematics designed to deal with unknown numbers, events which must be
inferred. Some mathematical problems can be dealt with quite simply by ordinary arithmetic. Others can be approached much more efficiently through the techniques of algebra, which make it possible to deal with matters which cannot be immediately designated. There are even some problems which cannot be dealt with except in algebraic terms. Holistic-inferential approaches to understanding behavior are like algebra. They make it possible for us to move quickly and efficiently to vital understandings without the plodding necessities imposed by behavioral objectives approaches. Like algebra, also, the holistic-inferential approaches do not deny the validity or usefulness of more atomistic approaches. They include them—and extend beyond them.

Precise answers to the assessment of personal meaning extend considerably beyond the scope of this booklet. Many techniques have already been worked out, either informally over the years by persons engaging in the various helping professions or, more recently, in the work of humanistically oriented psychologists. Since a great many persons today believe the problem is important, almost certainly we should be able to make tremendous strides in this form of assessment in the future. The immediate need is to go to work on a three-pronged effort directed toward:

1. Making meaning important. Since people only do what seems important to them, the first step in improving our capabilities for the assessment of meaning is to regard it as an important question. This calls for encouraging teachers, principals, supervisors, administrators, and everyone else engaged in the educational effort to understand that their inferences are important and helping them at every level to sharpen their skills in this regard. This will not be an easy task in view of the current preoccupation with strictly behavioral approaches to educational problems. The extraordinary pressures being placed on educators everywhere to emphasize such objectives leave little room for much concern with the development of skill in the assessment of personal meaning. A major first step in the encouragement of attention to personal meaning will, therefore, need to be the development of a more adequate perspective on assessment problems and deceleration of the current tallyho for behavioral objectives, behavioral modification, and performance-based criteria.

Beyond that, educators at every level of operation need to be encouraged to experiment with the assessment of personal meaning and to sharpen their own skills toward these ends. As we have
previously stated, the process of inference is a matter of reading behavior backward, and this is a process that all of us naturally use in dealing with people who are important to us. The problem for people on the firing line is to learn to do this more often, more systematically, and more effectively in their professional roles.

2. Collection and evaluation of already existing techniques. People have been making inferences about other people since time immemorial. As a consequence, we already have in existence ways of assessing personal meaning of an informal character accumulated through the experience of persons in helping professions over generations. A serious attempt should be mounted to gather these, assess their effectiveness, and make them more readily available to others throughout the profession.

In addition to such informal techniques, psychologists, sociologists, anthropologists, and others in the social sciences have developed an ever increasing number of more formal techniques over the past 30 or 40 years for assessing human attitudes, values, beliefs, and perceptions of self and the world. There is, for example, a very large literature on projective techniques and the use of personal documents for assessing personal meaning. Such studies need to be exhumed from wherever they are buried in the literature, examined and assessed, and made more widely available to persons who are interested in measuring personal meaning in more formal terms.

3. The development of new techniques. Vast sums of money are currently being poured into the effort to improve America's schools by the application of behavioral objectives approaches to assessment and by the injection of industrial techniques into every aspect of our educational effort. These tremendous capital outlays are matched by vast expenditures of human energies focused on behavioral approaches to educational accountability. We have already mentioned how this preoccupation can actually inhibit or destroy the search for viable alternatives to educational assessment.

Most of our financial and human resources are currently focused on doing more of what we already know very well how to do. What is badly needed now is the diversion of very large chunks of these financial and human resources to the exploration of problems we have so far sorely neglected. A redistribution to concentrate efforts on the study of personal meanings and their assessment in educational settings would provide education with enormous dividends within a comparatively short time.
Professional Accountability

Who Is Responsible for What?

In the final analysis, whatever success or failure education achieves will be dependent upon how effectively teachers carry out their professional responsibilities. Teachers surely must be accountable, but what can they truly be held accountable for? Current attempts at accountability recognize this principle and seek to make teachers accountable for the behavior of their students. Is this a tenable position? To answer that question we need to answer a prior one, namely, to what extent can any person, teacher or not, be held accountable for another person’s behavior?

Since behavior is never the exclusive product of any one stimulus or set of stimuli provided by another person, it follows that no human being can ever be held responsible for the behavior of another except under three possible conditions:

1. **If the other person is too weak or too sick to be responsible for himself.** Adults have to be responsible for some aspects of children’s behavior, especially acts which might prove harmful to the child or to others. The same rule applies to persons who are too sick to be able to care for themselves and who need the help of others. Acceptance of the responsibility to aid them has long been a basic tenet of our Judeo-Christian philosophy. Such conditions of responsibility are comparatively short-lived, however, existing only until the individual can care for himself. Generally speaking, the older a child becomes, the more it is necessary for him to assume responsibility for himself. The principle is clearly recognized in our courts. It is also the goal of human development as the organism strives for freedom, autonomy, and self-actualization. It ought to be the goal of education as well.

2. **If one person makes another person dependent upon him.** Whoever takes upon himself the responsibility for making decisions for another person has also assumed responsibility for his behavior. A person who, for whatever reason, has induced or seduced another to surrender his autonomy has at the same time assumed responsibility for his actions. This may occur in the case of some physicians who accept the principle of “total responsibility for the patient.” It may also occur in the case of the psychotherapist who permits his client to develop a deep transference, or in the case of a teacher who seeks to assume the role of a child’s mother. Such
dependent relationships may sometimes be desirable in the doctor-patient relationship.

In most of the other helping professions, not dependent on the helper doing something to his client, the development of such dependency is generally regarded as unfortunate and undesirable. Most modern approaches to psychotherapy, for example, carefully eschew the development of dependent relationships because they believe strong dependence of the client on the therapist saps the client's capacities to solve his own problems and unduly prolongs the therapeutic relationship. Certainly the development of dependency can have little place in education, an institution whose basic objective is the production of intelligent persons, capable of acting autonomously and freely with full responsibility for themselves.

3. If responsibility is demanded by role definition. Sometimes responsibility for another may be imposed on an individual by virtue of his peculiarly assigned role. An example might be the responsibility of the prison guard to make certain that prisoners do not escape. Such role-defined responsibilities for the behavior of others, however, are ordinarily extremely limited and generally restricted to preventive kinds of activities. So a teacher, by reason of his role, might be held responsible for keeping two children from fighting with each other. Holding him responsible for whether or not a child does his homework is quite another question. One cannot, after all, be held responsible for events not truly within his control, since few of us have much direct control over even the simplest behaviors of other persons.

The basic democratic philosophy on which our society rests holds that "when men are free they can find their own best ways." Citizens are regarded as free and responsible agents. Each is held accountable for his own behavior, very rarely for the behavior of others. Educators share these common responsibilities.

But what of professional responsibility? For what can teachers be held accountable simply because they are teachers? Surely not for the behavior of students five years from now; too many others have had their fingers in that pie. The teacher's influence on all but the simplest, most primitive forms of student behavior even in his own classroom cannot be clearly established. As children get older, the less can even those few items of behavior be laid at the teacher's door. The attempt to hold teachers responsible for what students do is, for all practical purposes, well nigh impossible.
Even if this were not so, modern conceptions of the teacher's role would make such an attempt undesirable. Increasingly, teaching is understood not as a matter of control and direction, but of help and facilitation. Teachers are asked to be facilitators rather than controllers, helpers rather than directors. They are asked to be assisters, encouragers, enrichers, inspirers. The concept of teachers as makers, forcers, molders, or coercers is no longer regarded as the ideal role for teachers, a position firmly buttressed by evidence from research. Such shifts in our thinking make the act of teaching a process of ministering to student growth rather than a process of control and management of student behavior.

We are accustomed to thinking of the proper model for teaching in medical terms, of the doctor, who knows, telling the patient, who does not know, what the problem is and what must be done. Such an approach to dealing with human beings works fine when dealing with their bodies, which can be manipulated by some outside force. Applied to teaching, learning in this sense is seen as the interaction of a teacher who knows and a student who does not know.

Actually, when dealing with human affairs the reverse of the medical model is far more often required. When changes to be produced must be made inside the individual where they cannot be directly manipulated, it is the student who knows and the teacher who does not know. Counselors and psychotherapists have come to understand this relationship, and almost all new concepts of psychotherapy are based in one form or another upon an open system of operation. In my own experience as a psychotherapist I have long since given up trying to guess how my clients will solve their problems. They always find much better solutions than anything I ever thought of, and with good reason. After all, it is their problem, they are living with it, and all I know about it is what they tell me in an hour or two a week. Since they are possessed of far more data than I, it is small wonder they find better solutions than the ones I might have thought of. I find the same principle is true in working with students in the classroom, and my teaching has immensely improved since I gave up deciding in advance the precise outcomes in terms of which my students should behave.

Teachers can and should be held accountable for behaving professionally. A profession is a vocation requiring some special knowledge or skill; but the thing which distinguishes it from more mechanical occupations is its dependence upon the professional
EDUCATIONAL ACCOUNTABILITY:

worker as a thinking, problem-solving human being. The effective professional worker is one who has learned how to use himself, his knowledge, and skills effectively and efficiently to carry out his own and society's purposes. Professional teachers, therefore, can properly be held accountable for at least five things:

1. Teachers can be held accountable for being informed in subject matter. This is so self-evident as to need no further discussion.

2. They can also be held responsible for being concerned about the welfare of students and knowledgeable about their behavior. It cannot be demanded of teachers that they love children. Love is a human feeling and cannot be turned on and off at will. Besides, some children are sometimes not very lovable. Professional responsibility, however, requires concern for the persons involved in the process, and such concern can and should be demanded of teachers and made an important aspect of assessment procedures.

3. Educators, whatever their titles, can also be held professionally responsible for their understanding of human behavior. Since people behave in terms of their beliefs, the beliefs teachers hold about what children are like and how and why they behave as they do play a crucial role in their influence upon students placed in their charge. Professional educators need the most accurate, sensitive, effective understandings about children and their behavior that it is possible to acquire in our generation. This also seems self-evident but is all too often violated in practice.

The beliefs many teachers hold about what students are like and why they behave as they do are sometimes little short of mythology. False and inadequate concepts abound throughout the profession and find expression in practices that are not only hindering, but are often downright destructive. One reason for this may be the inadequate behavioristic psychology which has served as the basic foundation for American education for more than 50 years. Whatever the reason, the beliefs teachers hold about the nature of behavior are crucial for their behavior toward students; and the character of these beliefs can and should be explored in any comprehensive attempt at assessing professional accountability.

4. Teachers may be held professionally responsible for the purposes they seek to carry out. Human behavior is purposive. Each teacher behaves in terms of what he believes is the purpose of society, of its institutions, of the schoolroom, of learning a subject, and, most especially, in terms of his own personal needs and goals. A major criticism of modern education posed by Silberman in his book Crisis in the Classroom is the “mindlessness” which he feels pervades all aspects of the system. So many things are done with no clear understanding of the purposes behind them. Too often the question “why” is not even asked.

The purposes held by educators play a vital role in determining what happens to students everywhere. They provide the basic dynamics from which practices are evolved. They are basic causes of teacher and administrator behavior and determine the nature of what goes on in classrooms and the schools and systems in which they exist. Yet purposes can also be explored, evaluated, and, when necessary, changed. As a consequence, any system of accountability must give the exploration, assessment, and continuous review of educators’ purposes an important place in its attempt to help education achieve its fundamental objectives.

5. Professional educators can be held responsible for the methods they use in carrying out their own and society’s purposes. This does not mean that educators must be required to utilize some previously determined “right” kinds of methods. So far as anyone can determine, there are no such things. Methods, in themselves, are neither good nor bad. They can only be judged in terms of the purposes they were used to advance and the impact they had on the persons subject to them.

The methods teachers use, we are beginning to understand, must be highly personal. They must fit the teacher, the students, the subject, the school, and the circumstances in which they are employed. This is likely to be a highly unique and individual matter, difficult or impossible to measure in terms of any previously concocted criteria. The essence of good professional work calls for thinking practitioners able to confront problems and find effective solutions. Often these solutions may be highly unique and incapable of measurement by standard techniques.

Professional responsibility does not demand a prescribed way of behaving. What it does require is that whatever methods are

used have the presumption of being good for the client. The emphasis is not upon guaranteed outcomes but on the defensible character of what is done. Doctors, for example, are not held responsible for the death of the patient. What they are held responsible for is being able to defend in the eyes of their peers that whatever they did had the presumption of being helpful when applied. Teachers, too, must be prepared to stand this kind of professional scrutiny of their information, beliefs, purposes, and the adequacy of the techniques which they use. Whatever they do should be for some good and sufficient reason, defensible in terms of rational thought, or as a consequence of informal or empirical research. This is an area of accountability sadly overlooked in most educational thinking.

In research on good and poor teachers at the University of Florida, good teachers stand up very well under these five criteria. The good ones seem to have developed positive perceptions of their subject matter, themselves, children, purposes, and methods in the course of their growth and experience without anyone consciously attempting to instill such perceptions. One wonders what might be done to improve the quality of teaching by a systematic process of helping teachers explore and discover more adequate conceptions in each of these areas. A program of accountability focused on such goals might prove to be far more significant for the production of positive change.

In the preoccupation with behavioral objectives and performance-based criteria as approaches to the problems of accountability, the factors involved in professional competence which we have mentioned have been given little attention. If one could be assured, however, of high levels of professional responsibility in school personnel, many of the problems of accountability would solve themselves. Speaking as a parent, I would be quite content to entrust the education of my children to professionally responsible teachers who understood behavior, were concerned about youngsters, knew their subjects, ascribed to positive purposes, and were willing and able to discuss and defend the practices they engaged in. If I had that I would feel little need to assess their productivity. I could rest content that in the process of responsibly carrying out their own professional goals they were also contributing to mine, my children's, and society's, too.

In this booklet I have made a strong plea for broader perspectives on the problem of educational accountability. I have
pointed out what seems to me to be an unfortunate and dangerous distortion of our educational effort brought about by the current preoccupation with behavioristic and industrial approaches to educational problems. In doing so I have called for greater attention to the humanistic aspects of education. Whenever humanists make such pleas they are often accused of being anti-intellectual, or of approaching difficult problems with nicey-nice unwillingness to confront hard issues.

The humanist does not ask the substitution of humanistic concerns for intellectual ones. As I have pointed out in this booklet, learning always consists of two aspects: the gaining of new information on the one hand and the discovery of its personal meaning on the other. The humanist’s complaint is that this balance is now badly out of kilter and education is in serious trouble, not so much for lack of providing information, but from failure to deal effectively with the meaning half of the learning equation.

What the humanist asks is redress of a balance overloaded on one half of the problem. Donald Snygg, a former colleague of mine, used to tell the story of an aboriginal tribe which believed that the worst thing that could happen to a man was that his spirit should escape from his body. Accordingly, when a man got sick people began to worry that his spirit might escape and, if local medicines and the witch doctor’s charms did not prove enough, the family would gather about the patient’s cot and stuff all of his body openings with a mixture of grass, leaves, and mud to keep his spirit from escaping from his body. Under this treatment, of course, the patient always died—but everyone felt better for having done something about it! Many a wrong in human history has been carried out by men of good intentions without proper perspective. The plea of the humanist for education is not that we give up behavioral approaches, but that we realistically recognize their assets and liabilities, and thereafter use them in proper balance with the humanistic aspects of the problem.

I am not opposed to accountability or even to behavioral objectives. I am opposed to oversimplification of the problem. Unfortunately, the behavioral objectives approach sounds infallible to the lay public, to industrialists, businessmen, and legislators. To them, the behavioral objectives, performance-based criteria approach seems like the perfect solution to education’s problems. Professional educators should know better. If they permit this distorted view to prevail unchallenged as the primary approach to educational accountability, they will have failed everyone: them-
EDUCATIONAL ACCOUNTABILITY

selves, the schools, society, but most of all a generation of students who will have to live out the consequences of such unquestioning capitulation to a partly right idea. At least four steps seem necessary to prevent such a tragedy from occurring:

1. Since people do only what seems important to them, humanistic goals for education must be rescued from oblivion and raised to front rank. There seems little hope of counteracting the iron grip of behavioristic approaches in which we currently find ourselves without much deeper understanding and appreciation of viable alternatives to accountability. These alternatives must be clearly stated, and stoutly debated in every possible arena.

2. Humanistic aspects of education and the kind of alternatives advocated in this booklet clearly must be valued. Humanistic thinking and objectives expressed in practice must be systematically recognized and rewarded wherever they are found throughout the system.

3. A moratorium on the current press for behavioral objectives should be called in order to give time for careful study of the consequences of this approach on students and teachers. Whatever is done in the name of accountability must, itself, be carefully assessed to assure that its ultimate outcomes do not interfere with the larger objectives of education. Special attention should therefore be given to the distorting effect behavioral approaches impose by almost exclusive preoccupation upon skills and the simplest, most primitive aspects of education. Whatever is done in the name of accountability must be used appropriately, and the accounters themselves must be held accountable for the effect of the practices they impose on the system.

4. A major effort designed to explore the nature of humanist thought and its implications for educational practice is called for. The effort might begin with the issues outlined in this paper but, almost certainly, would soon find itself moving far beyond these questions to new and exciting possibilities as yet undreamed of. A place to begin might be with the deflection to more humanistic concerns of a lion's share of the funds and human energies currently devoted to championing behavioral objectives. Such a diversion would provide the means and the manpower. It would also contribute to the moratorium called for. It might even result in saving the taxpayers a great deal of money.
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