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ABSTRACT
        Behavioral objectives are components of
problem-solving and evaluation systems, and of decision-making
strategies. Sound objectives meet the criteria of being formulated by
those expected to achieve them, are explicit and forward-looking, are
consistent with other goals within the organization, are set within
the context of a particular organization, and carry built-in
evaluations. In order for any objective to be considered as
measurable it must have the minimum components of actor, performance,
time, condition, and criteria, clearly defined. (Author/MLF)

Writing Behavioral Objectives

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Reasons for Writing <u>Behavioral</u> Objectives

Regardless of the way in which an objective, goal or desired outcome has been stated, there is no way of determining whether or not it has been achieved until there is an observable, overt, measurable act performed. The observable act may be very simple (like providing a report on the date promised) or com-plicated (like constructing a building by a specified time, according to complex building regulations). Without some concrete evidence, there is no way of knowing whether the person employed to do the job has done what he was hired to do. Terms must be defined carefully and statements must be clarified to the point where all who read them gain the same meaning.

There are various reasons for this. One major reason is for clear com-munication between employer and employee so both will know exactly what the employee is to do by a certain time under certain conditions, what his minimal level of expected performance will be, and how the employee will be evaluated. All of this can be stated so clearly in observable terms that both parties will know exactly what is expected.

Another major reason is so the employee will, if conditions or time limits are changed, have a protection from the employer regarding how he is to be evaluated.

A third major reason is simply to get the job done with greater efficiency.

A fourth more pressing reason for writing objectives in clearly defined observable terms is because this school system is moving toward an evaluation plan for administrators that uses measurable objectives as the primary component in judgment regarding the administrators' contribution to the system.

USES OF BEHAVIORAL OBJECTIVES

The uses of behavioral objectives are numerous. Here is a sample of primary uses of behavioral objectives:

1. They are used as a basic component in almost every problem solving system ever built.

2. They are a basic component in all decision making strategies or systems used by administrators (except, of course, those administrators who redouble their efforts when they lose sight of their goals).

3. They are major components in almost every evaluation system (except those that choose to keep the evaluatees in the dark about how they will be evaluated).

The concept regarding the use of behavioral objectives is simple. If you are going to engage in a project, that project must have a purpose (goal). At some point in time you will have to determine whether or not you have achieved that purpose (goal). In order to do this, you must clearly define (by use of behavioral objectives) exactly what the purpose is. After all, if you are not sure where you are going, you might end up someplace else.

Once you have done this, then the implementers of the project can know exactly what they must do to achieve those ends. This is done to let everyone know where you are going. Buildings and Grounds can look at your objectives to determine what they must do to supply you with space, materials, etc. Instruction can look at your objectives to determine what they must do to provide curriculum, supplies, people, etc. Personnel can look to see what type of personnel they need to supply the project. All departments in the system can clearly understand the role they need to play to help you develop and maintain your project or school.

If all projects did this, then the system could PERT out the objectives for them and define clearly when certain objectives must be met, who must perform certain functions in order for others to be <u>able</u> to do their jobs, etc.

In addition, you, the manager of a department or school, can begin to build objectives that are called interim behavioral objectives. These interim objectives can be used by you to assess how well your project is doing at points in time prior to the termination of the project so you can change or improve those components of the project that are failing before the end of the project.

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CRITERIA FOR SOUND OBJECTIVES

1. <u>They must be formulated by those who are expected to achieve them</u>.
   Managers at all levels must be involved in the formulation process of
   setting objectives.

2. <u>They must be explicit</u>. They may be general but should not be vague.
   They should impose a definite demand, and the language should be unmis-
   takable.

3. <u>They must be forward looking</u>. Sound objectives do not confine themselves
   to past achievements. They are concerned with a state of affairs that
   has not yet been reached! Necessarily then, an organization's objectives
   must be constantly reviewed and revised.

4. <u>They must be consistent with other goals within the same organization</u>.
   A general objective cannot be achieved if different groups in the same
   organization are working at cross purposes. The general objective should
   be flexible enough to allow for known differences, and the implementing
   objectives must be in harmony with it.

5. <u>They must be set within the context of a particular organization</u>. There
   is constant interplay between goals and experience. An organization can
   hope to achieve only what it is equipped to achieve. Outside factors
   must be taken into account. The same holds true for implementing goals.
   The level of skill in a department, for example, must be measured against
   output goals.

6. <u>They must carry built-in evaluations</u>. If an organization has sound ob-
   jectives, it will know when it has succeeded and when it has failed.
   Similarly, when the individual worker is given sound objectives, he will
   understand what is required of him and how he must go about achieving it.

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RULES FOR WRITING MEASURABLE OBJECTIVES

In order for any objective to be considered as measurable (observable or behavioral) it should be derived from a goal statement* and must have at least five components clearly defined. If any one of the five components is missing, the statement must be considered a goal statement and not an objective.

Minimum Components	Additional Quality Components
1. Actor (Who is to perform)	A. Educational defensibility
2. Performance (What will be done)	B. Product/Process difference clarified
3. Time (When will performance be done)	C. Evaluatable
4. Condition (What is the environment for performance)
5. Criteria (What are the minimum standards)

If one through five are present in statement of intent, then that statement can be considered a measurable objective. If it is measurable, then it can be generally considered to be evaluatable. An objective may be measurable/evaluatable and still be unacceptable as an educational objective due to its poor quality (i.e., if it fails the test question, "Is that all you are going to do?"). Therefore, a "quality" check should be made of each objective: Is the objective educationally defensible? A second "quality" check is: Does it distinguish between the product desired and the process by which the product will be achieved?

1.0 Actor. Who will actually perform the desired behavior must be clearly defined. An objective for a flying program might be, "Will take off and land airplane safely 9 out of 10 times." One might wonder not only what will happen the tenth time, but also who will do the flying? A pilot instructor, the trainee, the navigator, the stewardess?

2.0 Performance. What will actually be done? What specific, concrete, observable behavior will be performed? This implies that the manager and employee can both observe and measure whether or not the objective is completed. Basically, it also implies a cessation of the use of jargon called "educationese." Instead of saying that the needs of the children will be met, specify what those needs mean to you in such a way that the local village idiot can tell whether or not the needs were met as well as what you think they are. This is the most difficult part of behavioral objectives -- it is probably equivalent in difficulty to learning a

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* A goal statement is simply a statement of intent to accomplish something in the future.

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foreign language. However, it can be learned quickly with practice.

The trick here is to determine whether or not the objective is written in terms that one can see, touch, taste, feel or smell. These five senses are used by all of us to make judgments about people and projects. So just write in such a way that others can use their observational senses and be able to judge the success or failure of your objective.

The verb is the key word in the objective. If it describes a concrete, observable behavior like "count," "list," "sort," then you are on your way to a measurable performance. However, if the verb is more abstract, like "knows," "understands," "appreciates," then you will probably never come to earth and continue to write one goal statement after another. Goals are general, abstract. Objectives are specific, concrete, observable.

Example: Manager A says, "I am going to arrange the working conditions to insure that my employees will want to come to work." Administrator A says, "How will you determine whether or not they want to come to work?" Manager A says, "If they show up, obviously they want to come." Administrator A says, "If that is what you are talking about, why don't you keep records of how often they show up for work before you arrange the working conditions and then, after you arrange these conditions, compare the two rates of attendance."

Note: Implicit in the writing of behavioral objectives in observable (measurable) terms is the concept that the manager will, in fact, keep records regarding how well these objectives are met. A functional component of any MBO system is the employees' record keeping system. The employee must have records to show the manager how well he has achieved the objectives he and the manager negotiated. In other words, everyone must keep records, and those records must be organized and synthesized in such a way that all parties in the MBO system can use them for the decision-making process, in the evaluation process, in the problem solving process, in the program modification process and, finally and perhaps most important, in the accountability process. Incidentally, the accountability process goes both ways -- the manager is as accountable to his employees as they are to him and the organization for which they both work.

3.0 Time. A time to accomplish the objective must be specified so that a formal review can be conducted at the point in time specified to determine if:

a. the objective is or is not met on time

b. why it was not met, if this is the case

c. the manager should be rewarded (if it was met on time).

If the specified objective must be completed before other later objectives can be completed, it is necessary to specify a time component so the rest

of the system can go about its business. For example, Buildings and Grounds needs a certain amount of time to move portable buildings. Therefore, student transfers must be decided upon early enough to allow Buildings and Grounds to develop a work schedule to get portable class-rooms where they will be needed <u>before</u> school starts.

To continue the example further, if a time limit is set to stop accepting these student transfers in time for Buildings and Grounds to move portable classrooms and then the time limit is extended, Buildings and Grounds must not be held accountable if the portables are not in the right place at the right time.

Note: An additional part of Buildings and Grounds time consideration should include the amount of time needed to move, set up, and inspect each portable. PERT helps here.

4.0 <u>Conditions</u>. The manager must cite the conditions under which the employee and/or the manager will work in order to accomplish the objective. This is primarily a protection for the person who has to see that the objec-tive is met. It is also insurance for the manager that the employee will be aware of the various limiting parameters of his job as it relates to the objectives he has to accomplish. Conditions vary with objectives; however, conditions generally involve the tools, resources (money, time, space, personnel) and limitations the employee will have at his disposal. They may also involve specifications of what the employee should <u>not</u> accomplish as an objective.

Example: Administrator A says to Manager B in August, "It is your re-sponsibility to purchase materials and supplies, provide space and hire and train the personnel for Project ZERT. Have all of this done and ready by September 15, but do not exceed your budget." Manager B then says, "What is my budget for these categories?" Administrator A replies, "In this system, we don't know until January; but that doesn't make any difference -- you will be in real trouble if you exceed it, whatever it may be."

Note: In this example Manager B is the <u>Actor</u> responsible for not exceed-ing a budget.

5.0 <u>Criteria</u> <u>or</u> <u>Minimum</u> <u>Standards</u> <u>of</u> <u>Acceptable</u> <u>Performance</u>. This is a necessary component so that the evaluator and the evaluatee both under-stand the quality of performance required of the evaluatee before the task of project is started. This protects the evaluator or manager in that he has clearly stated to his employee how well the employee must do his job. The employee is protected in that he can cite the objective if he is required to do a better job (put in more time, effort, ect.) <u>after</u> the task or project is <u>started</u>. It also gives both the manager and employee a starting point in retraining the employee (or sometimes the manager) if he is unable to perform at minimum standards.

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<u>Example</u>: Administrator A says to Administrator B, "Teach the rest of our administrators how to write behavioral objectives." Then Administrator B goes before the rest of the administrators and gives a definition of a behavioral objective, and they, as a result of this "training," can write behavioral objectives. But now Administrator A says, "That's not what I wanted." Administrator B says, "I thought that was what I heard you say you wanted. Just what <u>did</u> you mean?" Administrator A should have more clearly defined the minimum standards of performance required to accomplish what he "meant."

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DICTIONARY OF TERMS

Accountability. Accountability in management generally refers to the concept
  of evaluation of the functions of planning, communication, coordination,
  participation, goal setting, control and performance. Accountability,
  when employed, presupposes organization goals and relates employee
  behavior to these goals in a manner that facilitates its evaluation.

Behavior/Performance. Any action that is observable, i.e., that other organ-
  isms can see, touch, taste, smell or feel.

Cognition. A generic term for any process whereby an organism becomes aware
  or obtains knowledge of an object.

Conditions. Factors or contingencies which have a bearing on the performance
  specified by a behavioral objective.

Criteria. The standards for minimal acceptable performance; for example, if
  an objective states that a typing test must be completed in 90 seconds
  with fewer than three errors, then "90 seconds" and "fewer than three
  errors" are the criteria for this objective.

Criterion Referenced Measurement. A process by which the behavior of an
  organism is compared to a previously stated desired behavior for that
  organism -- not necessarily a norm for all organisms of the type being
  measured.

Evaluation. The process of measuring the attainment of an objective. The
  measurement may be by application of a standard measurement tool or
  one designed specifically for this one objective. The method of measure-
  ment is specified when the objective is set, as is the time of evaluation.

Goals. The end or product toward which an effort or process is directed.
  A goal is all-inclusive in this respect and can be broken down into
  more specific products which will be achieved. Each such product can be
  defined as an objective. Goals provide the umbrella for defining objec-
  tives.

Management. A conscious or unconscious systematizing of any organization or
  function for the control or manipulation of its output. In modern organi-
  zations, management is usually identified as a specific function of
  specific persons in the organization.

Management by Objectives (MBO). A management alternative; one of several ways
  of systematizing an organization. Its goal is to integrate the functions
  of planning, communication, coordination, participation, goal setting, con-
  trol and performance on a day-to-day basis by relating all of these to
  objectives. These objectives assure organization output as defined and
  not merely as an attempt to meet individual and organizational needs.

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Measurement. Generally, the comparison of something with a unit or standard
          amount or quantity of that something in order to discover how many times
          the unit amount is contained in the first step.

Objective, Affective. Those behavioral objectives that relate directly to
          the acquisition of feelings, emotions, attitudes, etc.

Objective, Behavioral. A statement which describes a desired behavior, an
          agent who will perform the behavior, a time when the behavior will occur,
          any special conditions that need to be present for the behavior to occur,
          and the criteria which the behavior must meet to be minimally acceptable.
          A clear behavioral objective defines a measurable action. An impartial
          observer should be able to say explicitly whether the desired performance
          level has been achieved.

Objective, Cognitive. Thos objectives that relate directly to the acquisition
          of knowledge.

Performance. See Behavior. These terms are used interchangeably.

Performance Indicator. Refers to the action which has been specified in a
          behavioral objective. If one sets an objective of increasing student
          achievement 50% as measured on June 1 by a standard test, then performance
          on this test would be the performance indicator identified in this objec-
          tive as a measure of achievement.

Test, Criterion Referenced. An instrument used to compare the behavior of an
          organism with a previously stated desired behavior of that organism.
          Generally used to determine if an organism can demonstrate behavior
          commensurate to the minimum desired behavior.

Test, Standardized Achievement. An instrument given to a group used to dif-
          ferentiate individuals on a continuum according to their performance in
          a specified subject area.

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READING MATERIAL RESOURCES

Anderson, Vivienne and Davies, Daniel. Patterns of Educational Leadership,
    1956, Prentice-Hall Publishers, Englewood Cliffs, New Jersey

Bloom, B. S. Taxonomy of Educational Objectives: Cognitive and Affective
    Domains, David McKay Publishing Company, Inc., New York, New York 10017

_____. Taxonomy of Educational Objectives: The Classification of
    Educational Goals, Handbook I -- Cognitive Domain, David McKay Publish-
    ing Company, Inc., New York, New York 10017

Brett, S. M. edited by Maxwell. On Writing Behavioral Objectives for English,
    National Council for Teachers of English

Cook, D. Program Evaluation and Review Technique (PERT); Applications in
    Education, 1964, Allyn & Bacon Publishers, 470 Atlantic Avenue, Boston,
    Massachusetts

ERIC Report #ED 035 584, Behavioral Analysis Instrument for Teachers, Educa-
    tional and Cultural Center, Liverpool, New York

ERIC Report #ED 035 067, The Use of Behavioral Objectives in Evaluation:
    Relevant or Irrelevant, Marvin C. Alkin, author, University of Cali-
    fornia at Los Angeles, Center for Study of Evaluation

Krathwohl, D. R. Taxonomy of Educational Objectives: The Classification
    of Educational Goals, Handbook II -- Affective Domain, David McKay
    Publishing Company, Inc., New York, New York 10017

Likert, Rensis. New Patterns of Management, 1961, McGraw-Hill Publishers,
    330 West 42nd Street, New York, New York 10036

McGregor, D. The Professional Manager, 1967, McGraw-Hill Publishers, 330 West
    42nd Street, New York New York 10036

Maslow, Abraham H. Brandeis University, Eupsychian Movement, 1965, Richard D.
    Irwin, Inc., and the The Dorsey Press, Homewood, Illinois

Mager, Robert F. Goal Analysis, 1972, Fearon Publishers, Belmont, California

_____. Preparing Instructional Objectives, 1962, Fearon Publishers,
    Palo Alto, California

_____. Preparing Objectives for Programmed Instruction, 1962, Fearon
    Publishers, Palo Alto, California

National Science Teachers Association, Behavioral Objectives in the Affective
    Domain

Odiorne, George S. Management by Objectives, 1965, Pitman Publishing Company,
    New York

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