

How to write behavioural objectives

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INTRODUCTION

This chapter deals with the concept of behavioural objective in education. For most teachers, learning objectives are central to all lesson plans. Objectives that are used in education, whether they are called learning objectives, behavioral objectives, instructional objectives, or performance objectives are terms that refer to descriptions of observable student behavior or performance that are used to make judgments about learning - the ultimate aim of all teaching. At some point, almost every teacher, especially new teachers and teacher education students, must learn to write these types of objectives. Here, such objectives are referred to as learning objectives. Efforts are made to assist student teachers and other stakeholders to understand better ways of writing behavioural objectives.

This is because experience has shown that a good number of many less experienced teachers and students of teacher education alike still write their behavioural objectives in terms of their own performance. That is, starting behavioural objectives to reflect what they do instead of indicating the learner's activities and behaviour changes resulting from such activities. Some even use vague or ambiguous verbs to state their objectives. Many student teachers and less experienced teachers have found it difficult to state appropriate and correct behavioural objectives. It is against this background that this chapter is focusing on how best to write behavioural objectives. It therefore states the components of behavioural objectives, the appropriate behavioural verbs and when to use such verbs.

Functions of Behavioural Objectives

A well-constructed learning objective should leave little room for doubt about what is intended. Lee (2004) stated that a behavioural objective provides the teacher with the goal of the teaching-learning process. In other words, you know your destination when you begin instruction. They answer the questions, "What are the students supposed to know or be able to do once the unit or lesson is completed?" In addition, it provides a clear framework for assessment. Assessment is, after all, an effort to determine to what extent students have reached or achieved the objectives and it provides the students direction and a goal for learning. Students have a better opportunity to stay the course when they know the goal of the learning. Mager, (2009) observed that statement of learning objectives perform the following functions

- Guide for the teacher relative to the design of instruction
- Guide for the teacher for evaluation/test design (e.g. written tests, school examinations, etc)
- Guide for the learner relative to learning focus
- Guide for the learner relative to self assessment
- Statements of objectives tell others what we value.

- Causes careful thinking about what is to be accomplished through instruction.
- Helps relationship between teacher and learner because with explicit objectives the teacher is viewed less in an adversarial role because students are not forced to guess what is to be learned.
- Enhances possibility to create focused independent learning materials.
- Makes teaching more directed and organized.
- Communicates to colleagues what you are teaching thus enhancing collaboration and teamwork with colleagues.
- Helps facilitate those situations in which we want students to demonstrate competency (The objectives can be specified in such a way as to specify competency.)
- Aids in program evaluation
- Forces teacher to think carefully about what is important
- Helps avoid unnecessary repetitions in teaching
- Helps bridge the gap between vague, but relevant, and important, institutional goals and actual instruction
- Provides visibility and accountability of decisions made by teachers and learners.
- Provides models for the creation of objectives by students
- Helps students make decisions regarding prioritizing
- Provides feedback to learners as objectives are accomplished.

What is a Behavioural Objective?

Behavioral objectives, learning objectives, instructional objectives, and performance objectives are terms that refer to a description of observable student behavior or performance. At some point, almost every teacher, must deal with writing such objectives. Here, such objectives are referred to as behavioral objectives (Robert, 2009). Over the past years different ideas about how best to express instructional intent have existed. Learning objectives are about curriculum not instruction. This is a key point. Many tend to confuse learning objectives with objectives a teacher may have that relate to student conduct or behavior in a classroom. Properly constructed learning objectives are about the evidence of learning; they specify what behavior a student must demonstrate or perform in order for a teacher to infer that learning took place. Since learning cannot be seen directly, teachers must make inferences about learning from evidence they can see and measure.

Learning objectives, if constructed properly, provide an ideal vehicle for making those inferences. These differing views have created confusion for both students of teacher education and less experienced teachers. A behavioural objective is a term that refers to description of observable student behaviours that relate to learning. Due to the importance of behavioural objectives, Bob (2009) noted that at some points, almost every teacher, especially new teacher and teacher-education students must learn to write these types of objectives, Jekayinfa (2002) asserted that acquiring this skill is something that is necessary and important in the process of becoming a teacher. However for a teacher to become skillful in writing, there is need for practice, feedback and experience. Obed (1987) viewed behavioural objective as a proposed behaviour which the learner will pursue and acquire during the course of a lesson and manifest in an observable manner when the student completes the lesson. Objectives should not describe what the *teacher* does during the lesson (i.e., instructional strategies or methods). They may or may not overlap with the students' activities, but they ultimately should describe what the *student* is able to do after the learning.

Writing Appropriate Behavioural Objectives

It should be recognized that behavioural objectives are about curriculum not instruction. We should not confuse behavioural objectives with objective a teacher may have that relate to student behavioural or conduct in a classroom. Obed (1987) stated that behavioural objectives are learning objectives, they specify what behaviour a student must demonstrate or perform in order for a teacher to infer that learning has taken place. This is because learning cannot be seen directly: therefore teacher must make inferences about learning from evidence they can see and measure. If constructed properly, behavioural objectives provide a veritable vehicle for making those inferences. Majority of the student – teachers and less experienced teachers do not realize that the purpose of a behavioural objectives is to communicate.

Therefore a well-constructed behavioural objectives should leave little room for doubt about what is intended. According to Olawepo (1997), a well constructed behavioural objectives describe an intended learning outcome and contains three parts, each of which alone means nothing, but when combined into a sentence or two, communicate the conditions under which the behaviour is performed, a verb that defines the behaviour itself, and the degree (criteria) to which a student must perform the behaviour. If any one of these components is missing, the objective cannot communicate accurately. For example, Mager(2009) proposes writing specific statements about observable outcomes that can be built up to become a curriculum (an inductive approach).

An example of a behavioral objective:

Given 3 minutes of class time, the student will solve 8 out of 10 addition problems of the type: $5 + 4 = \underline{\hspace{1cm}}$.

It is in line with this that a behavioural objectives should contain the following components as posited by Bob (2009) and Obed (1987).

Conditions: (a statement that describes the condition under which the behaviour is to be performed).

Behavioural verb: (an action word that connotes an observable student behaviour)

Criteria: (a statement that specifies how well the student must perform the behaviour).

A behavioural objectives is the focal point of a lesson plan (Okunlayo 2001). A behavioural objectives is a description of an intended learning outcome and is the basis for the rest of the lesson. It provides criteria for constructing an assessment for the lesson as well as for the instructional procedure the teacher designs to implement the lesson. It is difficult, if not impossible to determine exactly what a particular lesson is supposed to accomplish, without behavioural objectives. One should begin with an understanding of the content to which the objective will relate in order to write behavioural objectives. It should be the goal of teachers as well as students the understanding in more than one way the content to be learned. In other words the teacher who prepares objectives as part of lesson plan should have more than superficial knowledge of the appropriate content. Inconsistency with the body of content in writing objective should be avoided. This is because it is considered a mere waste of time by Association of College and Research Libraries (2001): It should be noted that the purpose of this assertion is not to go into the area of curriculum consistency but rather present hints to help students of teacher education and less experienced teacher who may find it difficult in writing behavioural objectives.

Conditions: The conditions component of an objective specifies the circumstances commands directions etc that the student is given to initiate the behaviour relevant to intended student-learning performance can best be understood within the context of the condition under which the behaviour is to be performed or demonstrated under which the behavior is to be performed or demonstrated. Examples of the condition part of behavioural objectives usually start with this type of statements.

Upon request, the students will Given (some physical object) the students will At the end of the lesson, the students should...

We should note that there is no mention of the description of instruction that precedes the initiation of the behaviour. Here there is concentration on describing only the conditions under which the desired students' behaviour is to be performed.

Behavioural Verbs: Writing appropriate behavioural objective starts with choosing appropriate verb or phrase. A behavioural verb describes an observable product or action. In stating behavioural objective, the verb is an action word: It is a special kind of action word that leads to a destination. Behavioural verb is an action word that means an observable behaviour. For instance, the teacher may intend to make student appreciate or understand or know one thing or another. It is impossible to see when a student appreciates, understands or know something. What can be don is to make inferences that a student appreciates understands or knows something based on what the student does or says in a controlled situation.

Among the verbs that cannot and should not be used when stating objectives are as follows:

To appreciate

To acquire

To know

To understand

To love

To have faith in

To have mastery of

To believe in

To grasp the significance of etc

To enjoy

To like

To celebrate

These verbs or phrases have certain features in common and the most understanding are: These verbs are imprecise (2) They refer to non-observable behaviour which (3) Are difficult if not impossible to evaluate. Teacher are therefore advised not to use them when expressing behavioural objectives. In addition, Lee (2004) listed the following as Non-Examples of Objectives.

The learner will cut out patterns to color later in class. [This is an activity.]

The learner will work in groups to discover cause and effect for electromagnetic forces. [This is an activity.]

The teacher will provide work sheets for students to complete their math problems. [This is an instructional strategy or method that the *teacher* will do.]

State what students will do at the end of the lesson to demonstrate learning, not what they will do during the lesson to accomplish learning.

A behavioural verb is a word that denotes an observable action or the creation of an observable product. Verbs such as identify, name, and describe are appropriate because you can observe the act or product of identifying, naming, or describing. Some verbs are embedded in a phrase that gives them a specific behavioural meaning. The following verb and their definition as stated by Bob (2002) can be helpful when writing behavioural objectives.

DEFINE: To stipulate the requirement for inclusion of an object, word, or situation in a category or class. Element of one of the following must be included (1) the characteristics of the words, objects, or situation, that are included in the class or category (2) the characteristics of the words, objects or situations that are excluded in the class or category. To define is to set up criteria for classification.

CONSTRUCT: To make a drawing, structure or model that identifies a designated object or set of condition.

COMPOSE: To formulate a composition in written, spoken, musical or artistic form.

CLASSIFY: To place object, word, or situation into categories according to defined criteria for each category. The criteria must be made known to the students.

DISTINGUISH: To identify under conditions when only two contrasting identifications are involved for each response.

APPLY A RULE: To state a rule as it's applies to a situation object or even that is being analysed. The statement must convey analysis of a problem situation and/or its solution, together with the name or statement of the rule that was applied.

DEMONSTRATE: The students perform the operation necessary for the application of an instrument, model, and device or implement

NOTE: there is a temptation to use demonstration in objectives such as, the student will demonstration his knowledge of vowel sounds. As the verb is defined, this is an improper use of it.

DIAGRAM: To construct a drawing with label and with a specified organization or structure. Graphing, charting and mapping are types of diagramming, and these terms may be used where more exact communication of the structure of the used situation and response is desired.

DESCRIBE: To name all the necessary categories of objects, object properties, or event properties that are relevant to the description of designated situations. The objective is of the form. The student will describe this order, object, or event, and does not limit the categories that may be used in mentioning them. Specific or categories limitations, if any are to be given in the performance standards of each objective.

ESTIMATE: To assess the dimension of an object, series of objects, event or condition without applying a standard scale of measuring device. Logical technique of estimation, such as are involved in mathematical interpolation, may be used See **MEASURE**.

EVALUATE: To classify objects, situations, people, conditions, etc; according to defined criteria of quality.

TRANSLATE: To transcribe on symbolic from to another of the same or similar meaning.

STATE A RULE: To make a statement that conveys the meaning of the rule, theory or principle.

REPRODUCE: To imitate or copy an action, construction, or object that is presented.

ORDER: To arrange two or more objects or events in accordance with standard criteria.

PREDICT: To use a rule or principle to predict outcome or to infer some consequence. It is no-t necessary that the rule or principle be standard.

MEASURE: To apply a standard scale or measuring device to objects, or conditions, according to practices accepted by those who are skilled in use of the device or scale.

NAME: To supply the correct name, in oral or written form of an object, class of object, persons, places, conditions, or events which are pointed out or described.

IDENTITY: To indicate the selection of an object of a class in response to its class name, by pointing, picking up, underlining, marking, or other response.

INTERPRET: To translate information from observation, charts tables, and written material in a verifiable manner.

LOCATE: To stipulate the position of an object, place or event in relation to other specified object, places, or events. Ideational guide to location such as grids, order arrangement and time may be used to describe location. Note: locate is not to be confused with IDENTIFY.

LABEL: To stipulate a verbal (Oral or written) response to a given object, drawing, or composition that contains information relative to the known. But unspecified structure of these

objects, drawing or compositions. Labeling is a complex behaviour that contains elements of naming and identifying.

SOLVE: To effect a solution to a given problem, in writing or to effect it orally. The problem solution must contain all the elements required for the requested solution, and may contain extraneous elements that are not required for solution. The problem must be passed in such a way that the student is able to determine the type of response that is acceptable.

The Criteria: The criteria component of a behavioural objective is a declarative statement that described how well the behaviour must be performed to satisfy the intent of the behaviour verb (Obed, 1987). It should be clear that criteria are expressed in some minimum number or as what must be, as a minimum included in a students response. For instance, in Social Studies and Economics an objective might be of the form. Given a list of the thirty-six States in Nigeria (conditions), the students will identify (verb) the political parties controlling them (criteria). Or. At the end of the lesson (conditions) students will state (verb) five of the factors influencing location of industry in Nigeria. (Criteria).

Notice that the objective doesn't specify which state in Nigeria or which structure of industry. We should also know that the method used by the need to be modified if the students are expected to do more or less.

Lee (2004) provide the following examples of objectives :

The learner will list three characteristics of invertebrates.

The learner will design a healthy diet.

The learner will justify the actions of the main character of the play.

The learner will explain three causes of the Civil War.

The learner will solve fifteen division problems (with single digit divisors).

The learner will distinguish between faith and obedience in the life of a Christian.

The learner will compare the populations of any three states in the U.S.

The learner will label the parts of a cell.

The learner will spell 80% of the words on the spelling list correctly.

The learner will list at least five reasons that water is a necessary resource.

Robert (2009) suggested that the following behavioural verbs can serve as guide when constructing statement of behavioural objectives.

Knowledge

cite, label name, reproduce, define, list, tell, recall, remember, repeat, quote, pronounce,

identify, recognize, describe, memorize, locate, draw, write, select, match, recite, state,

Comprehension

examples, represent, summarize, depict, restate, interpret, infer, match, substitute, convert, give, express, defend, predict, distinguish, compare, extend, paraphrase, transform, review, generalize, translate, describe, illustrate, reword, vary, , discover, manage, relate, change, explain, alter, rephrase,

Application

apply, discover, manage, relate, classify, employ, demonstrate, manifest, utilize, make, solve, produce, predict, direct, practice, use, illustrate, report, change, present, modify, sketch, show, compute, evidence, prepare, choose, interpret, draw, model, paint, dramatize, collect,

Analysis

ascertain, diagnose, distinguish, outline, analyze, diagram, divide, reduce, associate, examine, separate, conclude, discriminate, find, determine, designate, dissect, infer, separate, categorize, classify, construct, differentiate, investigate, compare, contrast, survey, organize, research, subdivide, point out,

Synthesis

conceive, play, formulate, organize, modify, construct, imagine, produce, generalize, propose, theorize, combine, devise, originate, revise, compile, expand, plan, rewrite, compose, extend, pose, synthesize, create, integrate, project, write, design, invent, rearrange, develop, hypothesize, add to, role

Evaluation

recommend, solve, summarize, assess, contrast, appraise, conclude, critique, judge, deduce, select, justify, debate, verify, consider, weigh, relate, compare, criticize, evaluate, decide, ,

CONCLUSION

A well stated behavioral objective is the heart of any lesson plan. If the behavioural objective a teacher composes is difficult, immeasurable or non-observable or vague, the rest of the lesson he plans or creates that is based on the behavioral objectives is likely to be flawed. A teacher needs to spend little time thinking about what he is describing before writing a behavioural objectives so as to make the student behaviour observable. This process will assist the teacher to clarify what he intends, and he will be in better position to communicate that intent, to his students, regardless of their grade, level, age or subject. While preparing a lesson, the teacher should ask himself a question, Does this objective clearly communicate and describe the intended leaning outcome?" If not, then the objective should be rewritten. Students behavioural objectives that describe what they intend to achieve that he get as much feedback as possible about is effort in order to determine how far he is able to achieve his objectives.

Bibliography

- Association of College and research libraries (2001). Objectives for information literacy instruction. *Access. January 2001* Retrieved at <http://www.ala.org/acrl/quides/objinfolit/htm/>
- Bob .K. (2002). Definitions of behavioral verbs for learning objectives. *Access June 2002* Retrieved at <http://www.adprima.com/objective.htm>.
- Bob .K. (2009). *How to Write Learning Objectives that Meet Demanding Behavioral Criteria*. Retrieved 14/4/2009 at <http://www.adprima.com/wIo5.htm>.
- Jekayinfa A.A. (2005). Concepts in education related to teaching III. In Abimboba and Abolade (Eds). *Fundamental Principles and practice of instruction*. Ilorin: Belodan Nig.

- Enterprises and Tunde Babs Priter.
- Lee R. W. (2004). *Writing Learning objectives for Unit and lesson plan*. Retrieved 14/4/2009 at <http://www.harding.edu/dlee/objectives.pdf>.
- Obed. I.O. (1987). *Discover teaching*. Enugu: fourth Dimension publishing Co. Ltd.
- Okunloye R.W (2005). Concepts in education related to teaching II. In Abimboba and Abolade (Eds.) *Fundamental principles and practice of instruction*. Ilorin: Belodan Nig. Enterprises and Tunde Babs Printer.
- Lawal A. (2001). Concepts in education related to teaching IV. In Abimboba and Abolade (Eds.) *Fundamental principles and practice of instruction*. Ilorin: Belodan Nig. Enterprises and Tunde Babs Printer.
- Olawepo, J.A. (1997). *Introduction to principle of and practice of instruction*. Unpublished manuscript. Available from the Author, Department of Curriculum studies, University of Ilorin, Nigeria.
- Mager, R. F. (2009). *Information about behavioral objectives and how to write them*. Retrieved 14/4/2009 at http://www.nhlbi.nih.gov/funding/training/naa/curr_gde/index.htm
- Robert, K.(2009). *How to Write Behavioral Objectives*. Retrieved 14/4/2009 at http://www.nhlbi.nih.gov/funding/training/naa/curr_gde/index.htm
- Zais, R.S (1976). *Curriculum: Principles and foundations*. New York: Thomas Y. Crowell Company. Inc.

Exercises

1. Explain the concept of behavioural objective.
2. Enumerate the components of a good behavioural objectives.
3. Give examples of verbs that cannot be used to express behavioural objectives.
4. List five of behavioural verbs and when they can be used in your subject areas.