## The Journal of Extension

Volume 43 | Number 5

Article 25

10-1-2005

# ABC's of Behavioral Objectives-Putting Them to Work for Evaluation

Harry N. Boone Jr West Virginia University, hnboone@wvu.edu

Deborah A. Boone
West Virginia University, debby.boone@mail.wvu.edu



This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 4.0 License.

#### **Recommended Citation**

Boone, H. N., & Boone, D. A. (2005). ABC's of Behavioral Objectives—Putting Them to Work for Evaluation. *The Journal of Extension, 43*(5), Article 25. https://tigerprints.clemson.edu/joe/vol43/iss5/25

This Tools of the Trade is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact kokeefe@clemson.edu.



JOURNAL

GUIDELINES ABOUT JOE CONTACT

NATIONAL JOB BANK

**Current Issues** 

**Back Issues** 

October 2005 // Volume 43 // Number 5 // Tools of the Trade // 5TOT3











### ABC's of Behavioral Objectives--Putting Them to Work for **Evaluation**

#### **Abstract**

With shrinking budgets, evaluation and accountability become increasing important in the justification and impact of Extension programs and faculty. The key to solving the accountability issue is to develop clear, concise behavioral objectives as a part of each educational activity. This article discusses how to write measurable behavioral objectives that should be used for both planning and evaluation of Extension programs. Examples of well written behavioral objectives that can be used to measure impact are included.

#### Harry N. Boone, Jr.

Assistant Professor of Agricultural and Environmental Education hnboone@wvu.edu

#### **Deborah A. Boone**

Assistant Professor of Agricultural and Environmental Education Debby.Boone@mail.wvu.edu

West Virginia University Morgantown, West Virginia

In today's world of shrinking budgets, evaluation and accountability are necessary to justify the existence of Extension programs and faculty. The key to solving the accountability issue is to develop clear, concise behavioral objectives as a part of each educational activity. Behavioral objectives are a vital part of the planning process of all educational activities. Clearly defined objectives provide a sound basis for the selection or design of instructional materials, content, and/or teaching methods.

In addition, stating objectives sharply helps determine if the objective has, in fact, been accomplished and an impact has occurred. Having clear behavioral objectives that state specifically what you want the leaner to be able to do after attending your program is vital to the program as well as the evaluation of its impact. Extension educators struggle to develop evaluation instruments for their programs. Clearly stated objectives are vital to evaluating the outcome(s) of instruction.

Clearly stated objectives have four characteristics. First, the instructional objective must state the audience for the educational activity. Second, the observable behavior(s) expected of the audience must be identified. Third, the conditions under which the behavior is to be accomplished must be included. Finally, the degree to which the behavior is to be completed must be specified. Together these four components make up a measurable behavioral objective that will provide the cornerstone to your planning, delivery, and evaluation efforts.

#### **A--Audience**

Who is the audience for your educational activity? While it may appear the audience is obvious for most instructional activities, a common error may distort or prevent the evaluation of your program. First, one must consider the difference between the target and accessible population/audience. Your target may be all youth between 14 and 16 years of age in Typical County; however, your accessible population may be all 14-16 year old 4-H members who attended the County 4-H Camp. If you write your objective in broad terms and follow proper evaluation procedures, you will be held accountable for the behaviors of youth you never served. Your behavioral objective should identify the specific audience you plan to target.

A second mistake made by many inexperienced educators is to include teacher/trainer activities as a part of the behavioral objective. Consider the following example: "The trainer will demonstrate the proper steps of delivering a prepared speech." In this example, the activities are focused on what the trainer plans to do and not what the target audience will be able to master. Although it has the appearance of being one, the statement is not a behavioral objective because the audience and its performance are not identified. This statement could be made into a behavioral objective by rewording the statement to the following: "Upon completion of the lesson, 100% of the participants will be able to list the steps in delivering a prepared speech." The audience is the workshop participants.

#### **B--Behavior**

Each objective must identify the behavior or the performance the learner is expected to do. A behavioral objective should never include the instructional process or procedure as the behavior. It should always describe the intended results rather than the means of achieving those results.

The performance must be overt or directly observable. Performances that cannot be directly observed or performances that are mental, invisible, cognitive, or internal are considered covert and should never be used as a behavior unless they are included with another indicator (directly observable) behavior. See Figure 1 for specific examples on ways to correctly write behaviors.

Behaviors can be written for one of three "domains of learning." The cognitive domain deals with the acquisition of facts, knowledge, information, or concepts. Psychomotor behaviors use the mind in combination with motor skills (physical activities). Affective behaviors have to do with changes in attitudes, values, aesthetics, and appreciation.

Behavioral objectives written in the "cognitive" domain can be further divided into six levels of Bloom's Taxonomy. Bloom's Taxonomy (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956) includes:

- **Knowledge:** remembering of previously learned material; recall (facts or whole theories); bringing to mind.
- **Comprehension:** grasping the meaning of material; interpreting (explaining or summarizing); predicting outcome and effects (estimating future trends).
- Application: ability to use learned material in a new situation; apply rules, laws, methods, theories
- Analysis: breaking down into parts; understanding organization, clarifying, concluding
- **Synthesis:** ability to put parts together to form a new whole; unique communication; set of abstract relations
- **Evaluation:** ability to judge value for purpose; base on criteria; support judgment with reason. (No guessing).

# **Figure 1.** Examples, Good and Bad, of Including Behaviors in Objectives

#### Including Observable Behaviors in Objectives

- The participants will understand the difference between IRAs and Roth IRAs.
   Understand is a covert activity. How will you know the participants understand?
   Rewrite with an observable behavior. For example: Each participant will be able to list in writing the major differences between an IRA and a Roth IRA.
- Each participant in the program will develop a written conservation plan for his farm.
   The behavior is directly observable. You will be able examine each conservation plan.
- The youth will develop an appreciation for parliamentary law.
   Develop an appreciation is a covert activity. How will you know they appreciate parliamentary law? Rewrite with an observable behavior. For example:
   Participants will demonstrate an appreciation of parliamentary law by correctly using the principles in each business meeting.
- The instructor will demonstrate the steps in completing a 1040.
   This is not a behavioral objective. It is a statement of what the instructor will do.
   You can make it a behavioral objective by rewriting in the following manner: Upon completion of the training, participants will correctly list the steps in completing a 1040 income tax form.

#### **C--Condition**

Each behavioral objective must describe the conditions (if any) under which the performance is to occur. Conditions may include what the learner will be allowed to use, what the learner will be denied, under what conditions the learner is expected to perform the behavior, or specific skills that should be excluded (Figure 2).

## **Figure 2.** Examples of Adding Conditions to an Objective

#### Adding Conditions to an Objective

- What can the learner use:
   Given a maximum of six references, each participant will prepare a four to six minute extemporaneous speech.
- What is the learner denied:
   Without the use of any reference materials, the president will conduct the meeting using Roberts Rules of Order.
- Under what conditions is the learner expected to perform:
   Given a small engine with one problem, a set of diagnostic equipment, and a
   repair manual, the youth will diagnose and repair the small engine in less than 60
   minutes.
- Specific skills that should be excluded:
   Without restarting the computer, each participant will successfully change the display setting of their computer.

#### **D--Degree**

Finally, each objective must describe the degree to which the behavior must be performed to constitute an acceptable performance. It is not always necessary or practical to include the degree in an objective; however, the more information included in an objective the better it will communicate the desired outcome. The degree can include criterion such as speed, accuracy, and quality.

#### References

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives book 1: Cognitive domain.* New York: David McKay Company, Inc.

Mager, R. F. (1984). *Preparing instructional objectives*. Belmont, California: David S. Lake Publishers.

<u>Copyright</u> © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the <u>Journal Editorial Office</u>, <u>joe-ed@joe.org</u>.

If you have difficulties viewing or printing this page, please contact  $\underline{\textit{IOE}}$  Technical Support