Refining Statements about Goals (or Objectives)

When we think about goals (or about objectives)—whether they are related to academic pursuits or to personal goals, it's helpful to think about the **ABCDs** of goal-setting or objective writing.

The **ABCDs** of goal- or objective-setting was described by Heinlich, Molenda, Russell, & Smaldino, (1996) in *Instructional Media and Technologies for Learning.* Englewood Cliffs, NJ: Merrill) insights can be summarized as follows:

Before writing instructional objectives, ask yourself the following questions:

Who are my students?

What behaviors are observable?

Under what conditions or circumstances learning happens?

What degree of mastery is expected?

The A.B.C.D. method

The ABCD method of writing objectives is a starting point for writing objectives (Heinich, et al., 1996). In this system, *"A" is for audience; "B" is for behavior, "C" for conditions and "D" for degree of mastery needed.*

1. **Audience (A)** – Who are your learners?
2. **Behavior (B)** – What? What do you expect them to be able to do? This should be an overt, observable behavior, even if the actual behavior is covert or mental in nature. If you can't see it, hear it, touch it, taste it, or smell it, you can't be sure your audience really learned it.
3. **Condition (C)** – How? Under what circumstances or context will the learning occur? What will the student be given or already be expected to know to accomplish the learning?
4. **Degree (D)** – How much? How much will be accomplished, how well will the behavior need to be performed, and to what level? Do you want total mastery (100%), do you want them to respond correctly

80% of the time, etc. A common (and totally non-scientific) setting is 80% of the time.

Examples of Well-Written Objectives

Below are some example objectives which include Audience **(A)**, Behavior **(B)**, Condition **(C)**, and Degree of Mastery **(D).** Note that many objectives actually put the condition first.

Cognitive (comprehension level) -"C: Given examples and non-examples of healthy and unhealthy foods, A: the student B: will be able to accurately identify the examples and explain why each example is or isn't a healthy choice D: in 20 words or less."

Cognitive (application level) -"C: Given a sentence written in the past or present tense, A: the student B: will be able to re-write the sentence in future tense D: with no errors in tense or tense contradiction (i.e., I will see her yesterday.)."

Cognitive (problem solving/synthesis level) -"C: Given information about five students enrolled in your class, A: the student B: will be able to list five major traits of each student, combine these traits into a composite character, and develop a short composition D: using five of the major personality traits of the composite character."

Psychomotor - "C: Given a standard balance beam raised to a standard height, A: the student C: (attired in standard balance beam usage attire) B: will be able to walk the entire length of the balance beam (from one end to the other) D: steadily, without falling off, and within a six second time span.**"**

Affective - "C: Given the opportunity to work in a team with several people of different backgrounds, A: the student B: will demonstrate a positive increase in attitude towards non-discriminatory practices, D: as measured by a checklist utilized/completed by non-team members."

Notes on Objective Writing

When reviewing example objectives above, you may notice a few things.

1. As you move up the "cognitive ladder," it can be increasingly difficult to precisely specify the degree of mastery required.

2. Affective objectives are difficult for many instructors to write and assess. They deal almost exclusively with internal feelings and conditions that can be difficult to observe externally.
3. It's important to choose the correct key verbs to express the desired behavior you want students to produce. See verb list (Blooms' Taxonomy), affective objectives and psychomotor objectives to see examples of key words for each level.

Typical Problems Encountered When Writing Objectives

Objective Writing Problems with Solutions		
Problems	**Error Types**	**Solutions**
Too vast/complex	The objective is too broad in scope or is actually more than one objective.	Use the ABCD method to identify each desired behavior or skill in order to break objectives apart.
No behavior to evaluate	No true overt, observable performance listed. Many objectives using verbs like "comprehend" or "understand" may not include behaviors to observe.	Determine what actions a student should demonstrate in order for you to know if the material has been learned.
Only topics are listed	Describes instruction, not conditions. That is, the instructor may list the topic but not how he or she expects the students to use the information.	Determine how students should use the information presented. Should it be memorized? Used as background knowledge? Applied in a later project? What skills will students need?
Vague Assignment Outcomes	The objective does not list the correct behavior, condition, and/or degree, or they are missing. Students may not sure of how to complete assignments because they are lacking specifics.	Determine parameters for your assignments and specify them for your students.

Tying Objectives to Assessment

Once you establish all the behaviors, conditions and degrees of mastery for each objective, you can use them to determine what types of assignments, tests or alternative assessment (e.g. a portfolio) you should use in the course.

Examples of objectives for our students:

*When one of their children is ill (**condition**), ESL students (**audience**) will be able to phone the school office to report their child's absence (**behavior**) with 90% accuracy (**degree**).*

*Given the dimensions of each room on a house floor plan (**condition**), ABE students (**audience**) will be able to calculate the number of square yards of carpeting required for each room (**behavior**) with 90% accuracy (**degree**).*

Example of a goal for ourselves as teachers:

*When introducing my students to new content knowledge or skills (**condition**), I (**audience**) will model one or more questioning strategies (**behavior**) and provide guided practice and gradual release for my students (**behavior**) until they can perform the skill independently (**degree**).*