# **Penn State Learning Design Community Hub**

Home > Learning Objectives

# Writing Objectives

View

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## The Best Choice .... according to the experts

**Jones, 1997** – "Clear objectives can help the instructor design lessons that will be easier for the student tocomprehend and the teacher to evaluate".

**Lohr, no date** – "A properly written objective tells you what specific knowledge, skill, or attitude is desired and what method of instruction and criteria for learner achievement are required."

#### Rationale

Writing clear course objectives is important because:

Objectives define what you will have the students do.

Objectives provide a link between expectations, teaching and grading.

#### **Basic Information**

# Questions you need to think about

Who are your students? Freshman? Senior? A mix of different prior knowledge and experience?

Is this course a general education course or a course required for the major?

#### The A.B.C.D. method

The ABCD method of writing objectives is an excellent 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? 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 constructivist activities in a college classroom, A: the student B: will be able to accurately identify the constructivist examples and explain why each example is or isn't a constructivist activity 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 two cartoon characters of the student's choice, A: the student B: will be able to list five major personality traits of each of the two characters, combine these traits (either by melding traits together, multiplying together complimentary traits, or negating opposing traits) into a composite character, and develop a short (no more than 20 frames) storyboard for a cartoon D: that illustrates three to 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 races, A: the student B: will demonstrate an positive increase

# 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 the pages on a page on cognitive objectives (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 of 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.

The **Assessment section** discusses how to design methods to evaluate student performance and includes examples using different types of learning objectives.

# References

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## Additional Links

Writing Objectives (B. O'Bannon, University of Tennessee)

Behavioral Objectives and How to Write Them (Florida State University)

Writing Objectives (Uniformed Services University of the Health Sciences)

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