

Writing Goals and Objectives

*“If you’re not sure where you are going,
you’re liable to end up some place else.” ~ Robert Mager, 1997*

Instructional goals and objectives are the heart of instruction. When well written, goals and objectives will help identify course content, structure the lecture and guide the selection of meaningful and relevant activities and assessments. In addition, stating clear instructional goals and objectives help students understand what they should learn and exactly what to do to achieve them.

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Course Goals

A course goal may be defined as a broad statement of intent or desired accomplishment. Goals do not specify exactly each step, component, or ways to accomplish the task but they help pave the way to writing good instructional objectives. Typical course goals include a number of subordinate skills which are further identified and clarified as instructional objectives.

For example, an English 101 goal might be to *prepare students for English 103*. The goal *prepare students* specifies the big picture or general direction or purpose of the course. Course goals often do not specify student outcomes or how they will be assessed. If you are having difficulty defining a course goal, brainstorm reasons your course exists and why students should enroll in it. Your ideas can then generate course-related goals. Course goals often originate in the course description and should be written *before* developing instructional objectives.

Course Goal Examples:

Marketing course: Students will learn about personal and professional development, interpersonal skills, verbal and written presentation skills, understanding sales and buying processes, and developing and maintaining customer satisfaction.

Physical Geography course: Students will understand the processes involved in the interactions, spatial variations, and interrelationships between hydrology, vegetation, landforms, and soils and humankind.

Theatre/Dance course: Students will investigate period style from pre-Egyptian through the Renaissance as it relates to theatrical production. Exploration of period clothing, manners, décor, and architecture with projects form dramatic literature.

General Goal Examples:

- Students will know how to communicate in oral and written formats
- Students will understand the effect of global warming.
- Students’ perspective on civil rights will improve
- Students will identify key elements and models used in education
- Students will learn basic math skills
- Students will understand the laws of gravity

Comparison of Goals and Objectives	
Goals are:	Objectives are:
Broad, generalized statements about what is to be learned	Narrow, specific statements about what is to be learned
General intentions	Precise intentions
Intangible	Tangible
Abstract	Concrete
Cannot be validated	Can be validated or measured
Long term	Short term
Defined before analysis	Written after analysis
Written before objectives	Prepared before instruction is designed
<i>Goals should be written from the instructor's point of view</i>	<i>Objectives should be written from the student's point of view</i>

Table 1. Comparison of goals and objectives.

Instructional Objectives

Once you have written your course goal you can then develop your instructional objectives. Instructional objectives are different from goals in that objectives are narrow, discrete, intentions of student performance whereas goals provide students with a global statement of intent. Objectives are measurable and observable, goals are not (see Table1). Well-stated objectives clearly tell the student what they have to do, under what conditions the performance takes place, by following a specified degree or standard of acceptable performance. In other words, when properly written, your learners will know exactly what you expect them to do and you will be able to recognize when they have accomplished the task! Generally, each section/week/unit will have several objectives (Penn State University, 2007).

Objectives are measurable and observable, goals are not.

A common instructional objective model, developed by Heinich as cited by Smaldino, Lowther, and Russell (2008) is used by educators from a wide range of disciplines and follows the acronym **ABCD**: A=Audience, B=Behavior, C=Condition, D=Degree. Table 2 summarizes these characteristics. This guide will follow the ABCD model as a good starting point when learning how to derive well-stated instructional objectives.

ABCD Model of Instructional Objectives	
Audience	Who will be doing the behavior?
Behavior	What should the learner be able to do? What is the performance?
Condition	Under what conditions do you want the learner to be able to do it?
Degree	How well must the behavior be done? What is the degree of mastery?

Table 2. Characteristics of the ABCD model of instructional objectives. Source: Smaldino, Lowther and Russell (2008), citing Heinich.

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It is good practice to write an instructional objective for each behavior you wish to measure. By using the model as illustrated in Table 1, you will easily be able to fill in the characteristics to the right of each letter. This practice will allow you to break down more complex objectives (ones with more than one behavior), into smaller, more discrete objectives.

Behavioral Verbs

Key to writing instructional objectives is to use an action verb when describing the behavior you intend the students to perform. Action verbs such as *calculate, read, identify, match, explain, translate,* and *prepare* all can be used to further describe the behavior. On the other hand, words such as *understand, appreciate, internalize,* and *value* are not appropriate when writing instructional objectives because they are not measurable or observable. Use these words in your course goals but not when writing instructional objectives. See *Verbs to Use in Creating Educational Objectives* (Based on Bloom’s Taxonomy), at the end of this section.

Overt behavior: If the behavior is covert or not typically visible when observed, such as the word *discriminate*, include an indicator behavior to clarify to the student what she or he has to be able to do to meet your expectations (as a written instructional objective). For example, if you want your learners to be able to discriminate between good and bad apples, add the indicator behavior “*sort*” to the objective: *Be able to discriminate (sort) the good apples from the bad apples.*

...avoid using fuzzy phrases such as “to understand,” “to appreciate,” “to internalize,” and “to know” which are not measurable or observable.

What some instructors tend to forget is to write instructional objectives from the students’ perspective. Mager (1997) contends that when you write instructional objectives you should indicate what the learner is supposed to be able to do and not what you, the instructor, want to accomplish. Also, avoid using *fuzzy phrases* such as “to understand,” “to appreciate,” “to internalize,” and “to know” which are not measurable or observable. These types of words can lead to student misinterpretations and their lack of understanding of what it is you want them to do.

The Link Between Instructional Objectives and Course Activities and Assessment

After you have written your course goals and instructional objectives, it is time to design course activities and assessments which will tell you if learning has occurred. Matching objectives and activities and assessments will also check to see if you are teaching what you have intended. These strategies and activities should motivate students to gain knowledge and skills useful for success in your course, future courses and real world applications. Table 3 illustrates objective behaviors with related student activities and assessments.

Level of Learning For Knowledge	Student Activities and Assessments
<i>Define</i> (facts, tables, vocabulary lists)	Activity: Self-check quizzes, trivia games, word games Assessment: Vocabulary test, matching item quiz
<i>Solve or calculate</i> (concepts)	Activity: Have students show examples/non-examples, student-generated flowcharts Assessment: Equations, word problems with given set of data
<i>Set-up, manipulate, operate, build, demonstrate</i> (rules and principles)	Activity: Suggests psychomotor (hands-on) assessments, design projects and prototypes, simulations Assessment: Checklists, videotape the session
<i>Describe or explain</i> (problem-solving)	Activity: Case study, small group critical thinking, teamwork, pair share Assessment: Essays, research papers, discussion questions
<i>Present</i> (synthesis, create)	Activity: Develop a portfolio, design a project Assessment: Speech, projected presentation

Table 3. Matching cognitive domain levels of learning (Bloom’s Levels) with related student activities and assessments. Source: Adapted from Penn State University (2007).

Summary Examples of Instructional Goals, Objectives and Related Assessments

- Instructional Goal:** Know the conditions of free Blacks during antebellum south.
Instructional Objective: In at least 2 paragraphs, students will describe the conditions of free Blacks in pre-Civil War America, including 3 of 5 major points that were discussed in class.
Assessment: A traditional essay could be used.
- Instructional Goal:** Students will know how to analyze blood counts.
Instructional Objective: Given a sample of blood and two glass slides, students will demonstrate the prescribed method of obtaining a blood smear for microscopic analysis.
Assessment: Assessment could be done by instructor observation of student demonstration in a lab. A criterion checklist of critical steps can be used to provide objective scoring.
- Instructional Goal:** Students will interpret classic literature.
Instructional Objective: During the final exam period, students will be able to compare/contrast Shakespeare’s “Merchant of Venice” and Marlowe’s “Jaw of Malta” in terms of plot, character, and social-political themes.
Assessment: A traditional essay could be used with a criterion-checklist of key similarities and differences in these two plays.

Summary

Instructional goals and objectives are the heart of your instruction. When written well, goals and objectives will assist in identifying course content, help you structure your lecture, and allow you to select activities and assessments that are relevant and meaningful.

Several sources are available which can be used to check the accuracy of your instructional objectives. The sources below provide checklists and other instruments to help you design effective and meaningful objectives.

References

Mager, R. F. (1997). *Measuring instructional results: How to find out if your instructional objectives have been achieved*. (3rd ed.). Atlanta, GA:CEP Press.

[This source focuses on how to determine if your instruction is doing what it is supposed to do. Provides the basic tools through which to measure instructional success]

Mager, R. F. (1997). *Preparing instructional objectives: A critical tool in the development of effective instruction*. (3rd ed.). Atlanta, GA:CEP Press.

[This source presents a comprehensive and detailed description of how to write instructional objectives in an easy-to-read and witty format. **This is a “must buy” for anyone interested in writing effective instructional objectives**]

Penn State University (2007). Teaching and Learning with Technology unit. *Basic information about objectives*.

<http://ets.tlt.psu.edu/learningdesign/objectives/basicinfo>

Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2008). *Instructional technology and media for learning* (9th ed.). Upper Saddle River, NJ: Pearson.

Selected Resource

Gronlund, N. E. (2004). *Writing instructional objectives for teaching and assessment* (7th ed.). Upper Saddle River, NJ: Pearson.

[This source provides a checklist for evaluating objectives and a taxonomy of educational objectives by major category with illustrative objectives]

Verbs Used in Creating Educational Objectives						
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Definitions	Remembering previously learned information	Demonstrating an understanding of the facts	Applying knowledge to actual situations	Breaking down objects or ideas into simpler parts and finding evidence to support generalizations	Making and defending judgments based on internal evidence or external criteria	Compiling component ideas into a new whole or propose alternative solutions
Verbs	Arrange Define Describe Duplicate Identify Label List Match Memorize Name Order Outline Recognize Relate Recall Repeat Reproduce Select State	Classify Convert Defend Describe Distinguish Estimate Explain Express Extend Generalize Give examples Identify Indicate Infer Locate Paraphrase Predict Recognize Rewrite Review Select Summarize Translate	Apply Change Choose Compute Demonstrate Discover Dramatize Employ Illustrate Interpret Manipulate Modify Operate Practice Predict Prepare Produce Relate Schedule Show Sketch Solve Use Write	Analyze Appraise Breakdown Calculate Categorize Compare Contrast Criticize Diagram Differentiate Discriminate Distinguish Examine Experiment Identify Illustrate Infer Model Outline Point out Question Relate Select Separate Subdivide test	Appraise Argue Assess Attach Choose Compare Conclude Defend Describe Discriminate Estimate Evaluate Explain Judge Justify Interpret Relate Predict Rate Select Summarize Support Value	Arrange Assemble Categorize Collect Combine Comply Compose Construct Create Design Develop Devise Explain Formulate Generate Plan Prepare Rearrange Reconstruct Relate Reorganize Revise Rewrite Set up Summarize Synthesize Tell Write

Source:

<http://www.clemson.edu/assessment/assessmentpractices/referencematerials/documents/Blooms%20Taxonomy%20Action%20Verbs.pdf>