The differences between Goals and Objectives

Goals *describe broad learning outcomes and concepts* (what you want students to learn) expressed in general terms (e.g., clear communication, problem-solving skills, etc.).

Objectives *describe specific learning behaviors* that students should exhibit in the context of the course. Objectives are the specific skills, values and attitudes students should exhibit that reflect the broader goals (e.g., for students in a freshman writing course, this might be "students are able to develop a cogent argument to support a position"). Often in the assessment literature, "objectives" and "outcomes" are used interchangeably.

Identifying and Articulating Course Goals

Again, course goals reflect the broad concepts and skills you want students to develop as a result of your course. Explicit goals can help you focus the design and structure of your course and guide your development and implementation of specific, measurable course objectives.

So begin by asking yourself, "What are the major academic goals I want students to achieve in this course?" and write down your responses. Remember that the goal statements can be quite broad and theoretical. You will become more specific when you develop the learning objectives for the course.

If you are having trouble identifying course goals, try answering these questions:

- Why do you use current assignments, course structure, and activities? What is it you want to help students learn through these course elements?
- What do you want your students to learn and in what ways do you want them to grow?
- In the past, have your goals for students been realistic?
- What do your students usually learn and in what ways do they usually grow?
- Where do students have difficulty; what do they consistently not get?
- If you ran into a student who had taken your class the previous semester, what would you hope the student would say about what she took away from your course?

Drafting Course Objectives

Course objectives transform goal generalizations into specific student performance and behaviors that demonstrate student learning and skill development.

Here are three questions that focus on objectives in slightly different ways. Use them to help you identify course objectives:

- For each of your stated goals, what are the specific student behaviors, skills, or abilities that would tell you this goal is being achieved?
- Ideally and briefly, what would a skeptic need (what evidence needs to be present, what specific behavior needs to be visible) in order to see that your students are achieving the major goals you have set out for them?
- In your experience, what evidence tells you when students have met these goals – how do you know when they're "getting" it?

Effective Objectives

- use action words that specify definite, observable behaviors (See table on next page).
- indicate an appropriate level of attainment
- are assessable through one or more indicators
- comprehensively and meaningfully define a goal
- are realistic and achievable
- use simple language

Adapted from California State University, Bakersfield, PACT Outcomes Assessment Handbook (1999).

The University of Iowa maintains an on-line version of the Cross and Angelo (1993) *Teaching Goals Inventory (http://www.uiowa.edu/~centeach/tgi/)*. On the site, you can rate the importance of a host of learning goals and submit the results. You are provided with a summary report of the relative importance you place on various types of goals.

noteworthy

Bloom's taxonomy (1964) *is a well-known description of levels of educational objectives. It may be useful to consider this taxonomy when defining your objectives.*

Level	Cognitive Behaviors
1. Knowledge	to know specific facts, terms, concepts, principles, or theories
2. Comprehension	to understand, interpret, compare and contrast, explain
3. Application	to apply knowledge to new situations, to solve problems
4. Analysis	to identify the organizational structure of something; to identify parts, relationships, and organizing principles.
5. Synthesis	to create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme
6. Evaluation	to judge the quality of something based on its adequacy, value, logic or use

WORD POWER

Concrete verbs such as "define," "argue," or "create" are more helpful for assessment than vague verbs such as "know," "understand" or passive verbs such as "be exposed to." Some examples of action words frequently used in objectives are included in the table below.

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define	classify	apply	analyze	arrange	appraise
identify	describe	compute	appraise	assemble	assess
indicate	discuss	construct	calculate	collect	choose
know	explain	demonstrate	categorize	compose	compare
label	express	dramatize	compare	construct	contrast
list	identify	employ	contrast	create	decide
memorize	locate	give examples	criticize	design	estimate
name	paraphrase	illustrate	debate	formulate	evaluate
recall	recognize	interpret	determine	manage	grade
record	report	investigate	diagram	organize	judge
relate	restate	operate	differentiate	perform	measure
repeat	review	organize	distinguish	plan	rate
select	suggest	practice	examine	prepare	revise
underline	summarize	predict	experiment	produce	score
	tell	schedule	inspect	propose	select
	translate	shop	inventory	set-up	value
		sketch	question		
		translate	relate		
		use	solve		

Adapted from California State University, Bakersfield, PACT Outcomes Assessment Handbook *(1999).*

What are some examples of effective goals and objectives?

The goals and objectives that follow are examples for you to consider as you think about your own.

Biology
Course Goal

Students will learn and demonstrate use of the scientific method for original scientific research.

Objectives

- The student will demonstrate that s/he has formulated an hypothesis, designed a good experiment, controlled variables, operationally defined terms and interpreted data appropriately
- The student will demonstrate understanding of the scope and sequence of the scientific report format by outlining and completing a report based on one of the in-class experiments.

adapted from California State University Multi-Campus Team Drafts (1998).

English Composition
Course Goal

Students will learn to acknowledge and adjust to a variety of writing contexts.

Objectives

- The student will demonstrate through discussion, planning and writing an awareness that audiences differ and that readers' needs/expectations must be taken into account as one composes text
- The student will demonstrate in writing the ability to draft and revise work with a sense of purpose and an awareness of audience

adapted from California State University Multi-Campus Team Drafts (1998).

Management
Course Goal

The student will identify those activities that are most likely to distinguish effective, well-managed technology development programs from ineffective programs.

Objectives

- The student will outline the six components of an effective management development program.
- The student will develop a formal evaluation checklist to assess program success.

adapted from Diamond, Designing and Assessing Courses and Curricula *(1998).*

Religion
Course Goal

The student will demonstrate an understanding of the theological foundation of the course.

Objective

- When given a definition of the term "religion," the student will identify which of the following characteristics is emphasized: feeling, ritual activity, belief, monotheism, the solitary individual, social valuation, illusion, ultimate reality, and/or value.

adapted from Diamond, Designing and Assessing Courses and Curricula *(1998).*

History

Course Goal
The student will learn to work as a "knowledgeable practitioner" in the discipline.

Objectives
The student will be able to:
- describe relevant historical events and people
- argue as an historian does
- take a position on a debatable historical issue
- use historical data as evidence for a particular position or point of view
- raise and answer counter-arguments

Mathematics

Course Goal
The student will be able to apply course concepts to mathematical problem-solving models.

Objectives
- The student will be able to solve algebraic and quadratic equations
- The student will demonstrate the ability to explain each step in the problem solving process

Economics

Course Goal
Students will use economic theory and modeling to explain government policies and their effects.

Objectives
- Students will choose one topic relevant to current economic events and explain its relevance in terms of economic principle and theory
- Students will develop and run a statistical model analyzing the current rate of inflation in relation to the CPI

Physics

Course Goal
The student will be able to state and apply physical concepts in their own words and to discuss what they don't know.

Objectives
- The student will select one physical law and design an experiment to demonstrate its application
- The student will write a report on the experiment, including a section addressing unanswered questions

Education

Course Goal
As a result of taking this course, the student will be able to evaluate and apply educational theory and philosophy to the reality and challenge of today's system of education.

Objectives
At the conclusion of this unit, the student will be able to:
- discuss the philosophical foundation of education
- identify popular theories of education and teaching
- begin to apply philosophy and theory of education to their own development as an educator
- assess the contribution and development of the other members of the assigned task group

Examples on this page have been adapted from Walvoord & Anderson, Effective Grading *(1998).*

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