Writing Course Objectives

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- **What is an instructional objective?**
  An instructional objective is an explicit description of what students will be able to do as a result of the instruction they receive (Dick & Reiser, 1996).

- **Why Write Objectives?**
  Quality objectives are like a road map to the course. By developing a coherent and logical map, students and instructor have clear directions on the road of the course. Objectives also permit self-evaluation, help determine if students will succeed in acquiring skills and knowledge, and provide a framework for students and instructor to work toward.

- **Objective vs. Goal**
  There is often confusion about a goal and an objective. Goals are general statements of desired instructional outcomes and can be broken down into more specific behaviors (Dick & Riser, 1996). Goals are often used as a focus for curriculum development as they are general and abstract. Course objectives should be more narrow, tangible, and able to be validated.

- **What makes a quality objective?**
  - *Describe a specific measurable behavior that the learner should perform. Objectives should describe student performance in observable terms and be meaningfully assessed.*
  - *Indicate what the instructor expects of the learner.*
  - *Learner-centered, and not instructor-centered. Make sure your objectives state what the students will do and not what the instructor will do. In addition, they should be stated clearly, avoiding jargon and complex language, allowing students to grasp their meaning.*
  - *State measurable terms.*
  - *State an outcome not an activity. For example, Students will be able to name all... (outcome) vs. Students will take a test... (activity).*
  - *Address course and unit/lesson objectives/outcomes.*
  - *Be appropriate for the level of the course. Quality Matters recommends that lower-division courses address content mastery, critical thinking skills, and core learning skills. Upper-division and graduate courses should be discipline specific.*
  - ***Source: University of Wisconsin Extension Learning Innovations, New Course Development Training (August 2005)*

- **Bloom's Taxonomy of Cognitive Domain**
  A hierarchy from less to more complex ideas of student learning.

LEVEL	DEFINITION	SAMPLE VERBS	SAMPLE BEHAVIORS
KNOWLEDGE	Student recalls or recognizes information, ideas, and principles in the approximate form in which they were learned.	Write List Label Name State Define	The student will define the 6 levels of Bloom's taxonomy of the cognitive domain.
COMPREHENSION	Student translates, comprehends, or interprets information based on prior learning.	Explain Summarize Paraphrase Describe Illustrate	The student will explain the purpose of Bloom's taxonomy of the cognitive domain.
APPLICATION	Student selects, transfers, and uses data and principles to complete a problem or task with a minimum of direction.	Use Compute Solve Demonstrate Apply Construct	The student will write an instructional objective for each level of Bloom's taxonomy.
ANALYSIS	Student distinguishes, classifies, and relates the assumptions, hypotheses, evidence, or structure of a statement or question.	Analyze Categorize Compare Contrast Separate	The student will compare and contrast the cognitive and affective domains.
SYNTHESIS	Student originates, integrates, and combines ideas into a product, plan or proposal that is new to him or her.	Create Design Hypothesize Invent Develop	The student will design a classification scheme for writing educational objectives that combines the cognitive, affective, and psychomotor domains.
EVALUATION	Student appraises, assesses, or critiques on a basis of specific standards and criteria.	Judge Recommend Critique Justify	The student will judge the effectiveness of writing objectives using Bloom's taxonomy.

- **Verbs to Use**

Knowledge	Comprehension	Application	Analyze	Synthesis	Evaluation
• Cite	• Arrange	• Adapt	• Analyze	• Arrange	• Appraise
• Choose	• Associate	• Apply	• Appraise	• Assemble	• Approve
• Define	• Clarify	• Catalogue	• Audit	• Build	• Assess
• Label	• Classify	• Chart	• Break down	• Combine	• Choose
• List	• Convert	• Compute	• Calculate	• Compile	• Conclude
• Locate	• Describe	• Consolidate	• Categorize	• Compose	• Confirm
• Match	• Diagram	• Demonstrate	• Certify	• Conceive	• Criticize
• Name	• Draw	• Develop	• Compare	• Construct	• Critique
• Recall	• Discuss	• Employ	• Contrast	• Create	• Diagnose
• Recognize	• Estimate	• Extend	• Correlate	• Design	• Evaluate
• Record	• Explain	• Extrapolate	• Criticize	• Devise	• Judge
• Repeat	• Express	• Generalize	• Deduce	• Discover	• Justify
• Select	• Identify	• Illustrate	• Defend	• Draft	• Prioritize
• State	• Locate	• Infer	• Detect	• Formulate	• Prove
• Write	• Outline	• Interpolate	• Diagram	• Generate	• Rank
	• Paraphrase	• Interpret	• Differentiate	• Integrate	• Rate
	• Report	• Manipulate	• Discriminate	• Make	• Recommend
	• Restate	• Modify	• Distinguish	• Manage	• Research
	• Review	• Order	• Examine	• Organize	• Resolve
	• Sort	• Predict	• Infer	• Plan	• Revise
	• Summarize	• Prepare	• Inspect	• Predict	• Rule on
	• Transfer	• Produce	• Investigate	• Prepare	• Select
	• Translate	• Relate	• Question	• Propose	• Support
		• Sketch	• Reason	• Recorder	• Validate
		• Submit	• Separate	• Reorganize	
		• Tabulate	• Solve	• Set up	
		• Transcribe	• Survey	• Structure	
		• Use	• Test	• Synthesize	
		• Utilize	• Uncover		
			• Verify		

Level 1: Recall   **Level 2: Interpretation**   **Level 3: Problem-Solving**

- **Verbs to Avoid**

The following verbs cannot be measured or are redundant:	
Able to	Shows interest in
Appreciation for	Knows
Awareness of	Has knowledge of
Capable of	Learns
Comprehend	Memorizes
Conscious of	Understands
Familiar with	Will be able to

- **The Formula**
  - *Audience:* The student!
  - *Behavior:* Describes what the student will be expected to do as a results of the instruction
  - *Condition:* The circumstances under which the behavior is to be completed should be stated, including what tools or assistance is to be provided.
  - *Degree:* Describes the level of performance and how well or quickly the student will be expected to perform the behavior.

- **Examples**
  - *Recall:* After attending lecture and reading the assigned materials, the student will state the function of a thermometer.
  - *Interpretation:* After attending lecture and studying the assigned materials, the student will demonstrate how a thermometer works.
  - *Problem-Solving:* After attending lecture and studying the assigned materials (including problem sets), the student will formulate the degrees in C given the degrees in F, or vice versa.

- **Resources**

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