

Appendix 2

Guideline for Writing Measurable and Specific Outcome Competencies

Reference: Preparing Instructional Objectives by Robert F. Mager, published by Lake publishers of Belmont, CA. June, 2001.

Instructional objectives contain three parts: 1) the condition, 2) the criteria, and 3) the outcome competencies (performance). Each part is examined in detail below:

a. Condition: The condition for many college course objectives is an examination given at a specific time and location. However, the condition might include more specific information such as:

1. What will the student be allowed to use? (text book, calculator, etc.)
2. What will the student NOT be allowed to use? (notes)
3. Under what conditions will the instructor expect the student to perform? (classroom)

b. Criteria: The criteria describes the standards of acceptable performance and should be only imposed if they are important. Possible criteria include speed, accuracy, and quality. Questions that an instructor may ask concerning criteria are:

1. Does the criteria say something about the quality of desired performance?
2. Does the criteria say something about the real standards?

c. Outcome Competencies: The condition and criteria are relatively easy to specify, and often assumed in college courses. However, defining the outcome competencies (performance objectives) in measurable terms is the portion that seems to challenge new instructors. Some performance objectives can be directly observed through visual or audible means. The overt performance objectives are easy to measure. However many performances, such as mental or cognitive skills are covert. An instructor must find an observable indicator of the performance objective such as writing an answer to a math problem in a blank. All instructors want their students to know or understand the subject, but "know" and "understand" are not observable. The question that an instructor must ask is "How will the students prove that they can perform the task?" This outcome competency should be the simplest and most direct possible. Provided below are "False" Competencies and "Correct" measurable competencies:

1. False Competencies:

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| 1. To know.... | 2. To demonstrate a comprehension of.... |
| 3. To have an appreciation of | 4. To have a thorough understanding of |
| 5. To be able to think critically about.... | |

2. Correct Outcome Competencies:

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|------------------------------|-------------------------------|----------------------------|
| 1. Be able to list.... | 2. Be able to sort.... | 3. Be able to analyze.... |
| 4. Be able to calculate.... | 5. Be able to draw.... | 6. Be able to contrast.... |
| 7. Be able to categorize.... | 8. Be able to participate.... | 9. Be able to define.... |
| 10. Be able to edit... | 11. Be able to describe.... | 12. Be able to discuss.... |
| 13. Be able to evaluate | 14. Be able to determine | 15. Be able to plan.... |