WRITING PERFORMANCE OBJECTIVES

INTRODUCTION

Goals and objectives frequently are stated in general rather than precise language. The following goals are very appealing:

1. The student will understand chemical changes.
2. The student will appreciate art.
3. The student will enjoy classical music.
4. The student will know criminal law.
5. The student will understand the genre of a short story.

However, each goal is open to many interpretations. How does one demonstrate knowledge of criminal law? Does one give the textbook definition of criminal law? Does one distinguish between felonies and misdemeanors? The listed goals may be worthy goals of instruction, but they are not suited for direct assessment. To determine the achievement of these goals, specific performance objectives need to be stated.

WHAT IS A PERFORMANCE OBJECTIVE?

Specific performance objectives offer the best available means to measure the achievement of educational goals. A performance objective is distinguished from a goal by three characteristics: (1) specifying the student behavior that will be accepted as evidence that the objective has been met, (2) describing the conditions under which the behavior is expected to occur, and (3) specifying the criteria of acceptable performance that the student must attain. For example, given the goal: “The student will understand criminal law,” the following performance objectives might be stated:

- a. Given a case study of a crime, the student will identify whether it is a robbery, burglary or theft.
- b. Given a case study of a crime, the student will determine who is the principal in the first degree, the principal in the second degree, accessory before the fact, and accessory after the fact.

Both of these objectives possess all three characteristics of a performance objective. Each specifies a behavior: In the first objective, “identifying” and in the second, “determining.” In each of these objectives, the criterion of acceptable performance is 100% (In the first objective the student is either right or wrong. In the second, all four individuals must be properly classified for the student to meet the objective).

Specifying Behavior

The first characteristic of a performance objective is that it specifies the type of learner behavior that will be accepted as evidence that the learner has achieved the objective. Such objectives emphasize student performance, not instructor performance. Objectives stated in terms of what the instructor will be doing can be met without any student learning
taking place (e.g., the objective of presenting certain information to the class may be met without the student necessarily understanding the presented information).

Not only is the performance objective presented in terms of student rather than instructor behavior, it also specifies what the student will be doing. Nonperformance objectives are stated in terms of unobservable behaviors in contrast to performance objectives which are presented in terms of observable behaviors. The following lists contain many performance and nonperformance terms frequently found in objectives.

<table>
<thead>
<tr>
<th>Performance</th>
<th>Nonperformance</th>
</tr>
</thead>
<tbody>
<tr>
<td>calculate</td>
<td>acquire skills in</td>
</tr>
<tr>
<td>distinguish between</td>
<td>analyze</td>
</tr>
<tr>
<td>draw</td>
<td>believe in</td>
</tr>
<tr>
<td>identify</td>
<td>discover</td>
</tr>
<tr>
<td>list</td>
<td>enjoy</td>
</tr>
<tr>
<td>locate</td>
<td>evaluate</td>
</tr>
<tr>
<td>retell</td>
<td>grasp the significance of</td>
</tr>
<tr>
<td>separate into categories</td>
<td>have faith in</td>
</tr>
<tr>
<td>solve</td>
<td>have mastery of</td>
</tr>
<tr>
<td>state</td>
<td>know</td>
</tr>
<tr>
<td>summarize</td>
<td>love</td>
</tr>
<tr>
<td>write</td>
<td>understand</td>
</tr>
</tbody>
</table>

To grasp the significance of facts and opinions, to know verbs and adverbs, or to understand area are imprecise terms that mean different things to different learners. In contrast, to distinguish between facts and opinions, to separate a list of words into the categories of verbs and adverbs, and to calculate the area of a rectangle are more specific terms that should mean the same thing to all learners.

**Describe conditions for learning**

The second characteristic of a performance objective is that it describes conditions for learning. Conditions refer to the circumstances under which a behavior is expected to occur and are often introduced by the terms “given” or “presented with.” (Given a list of 20 objectives, the student will identify the 10 that are stated in performance terms). A change in conditions can dramatically alter the nature of an objective. For example, the objective: “Given a standard tape measure, the student will determine the length of a desk to within 1/2 inch of actual length” is very different from the objective: “Without the aid of any measuring device, the student will determine the length of a desk to within 1/2 inch of actual length.”

**Specifying a criterion**

The third characteristic of a performance objective is that it specifies a criterion of acceptable performance. The criterion of acceptable performance is the level at which the objective must be met and is established prior to assessment. The criterion for the objective presented above (“Given a list of 20 objectives, the student will identify the 10 that are stated in performance terms.”) is 100%. The student must identify all 10 of the performance objectives to meet the objective. Often a specific percentage (e.g., 70%) or a ratio (e.g., 4 out of 5) is stated as the criterion of acceptable performance.

**EXAMPLES OF PERFORMANCE OBJECTIVES FOR BIOLOGY AND FOR LITERATURE**

The following two examples of performance objectives from Lion F. Gardiner’s *Planning for Assessment* (N.J. Department of Higher Education) demonstrate the type of performance that can result from utilizing the processes described in this paper.

**Biology performance objective.** Given data collected in marine, freshwa-
ter, or terrestrial ecosystems, the student will develop and describe in adequate
detail one or more hypotheses that will satisfactorily account for all data
provided; demonstrate how the evidence supports the hypothesis or hypo-
theses; and, if alternative hypotheses exist, choose from among them the best
one, supported by the evidence, fully justifying his/her choice.

**BIOLOGY STANDARD OF PERFORMANCE.** Attainment of this objective will be
demonstrated by writing an essay in which the student will respond to data he/
she has not previously encountered. The essay will be scored as “acceptable” or
“unacceptable” by two departmental faculty members. If there is not agreement
among scorers, a third faculty member will score the exam and determine if the
essay is “acceptable” or not.

**LITERATURE PERFORMANCE OBJECTIVE.** Given three weeks of studying prose
fiction such as short stories or novellas, the student will
(1) articulate one work’s major theme;
(2) articulate two leitmotifs;
(3) discuss character motivation, interaction, and development;
(4) articulate whatever conflicts and resolutions of conflict are present; and
(5) identify metaphors, symbols, and images that substantiate (1), (2), and (3)
above.

**LITERATURE STANDARDS OF PERFORMANCE:**

*Minimum acceptable level of Mastery: Thorough discussion of (1), (3),
and (4) (content analysis), with clear statements fully supported by textual
evidence.*

*Excellent responses: Mastery response plus (2) and (5) (rhetorical analysis
of form) similarly clearly written and supported.*

Correctness of information throughout is assumed. Assessment will be by
means of an essay requiring the student’s reaction to novel (to her/him)
passages from classic works.

The essay will be scored by two members of the departmental faculty as
“Acceptable,” “Unacceptable,” or “Excellent.” If there is not agreement among
scorers, a third scorer will score the essay and will determine the final score if
his/her score is the same as one of the two original scorers. If not, a fourth
scorer will be used.
RELATING PERFORMANCE OBJECTIVES TO PROGRAM GOALS

INTRODUCTION

Skill in writing performance objectives must be augmented by the development of procedures to establish worthwhile performance objectives leading to mastery of the goals that the academic department judges to be important for a particular major.

If a department develops performance objectives that are related to the important concepts in a major, the objectives will be worthwhile and not based upon trivia.

Goals are broader and more general in nature than objectives. Goals often use nonperformance terms ("knows," "understands," "enjoys," "appreciates," and "has mastery of") that are unacceptable for writing performance objectives. The following are examples of goals:

1. Students will understand parts of speech.
2. Students will understand types of angles.
3. Students will think critically.
4. Students will appreciate good literature.
5. Students will understand the Periodic Table.

RELATIONSHIP BETWEEN GOALS AND PERFORMANCE OBJECTIVES

The procedure of establishing the performance objectives most appropriate to a goal begins with identification of the goal to be mastered. For example, to write objectives related to the concept of basic shapes, the goal might be stated as "Understanding basic shapes." Once the goal has been identified, the next step is to specify one or more performance objectives that relate to the stated goal. This relationship of performance objectives to a goal may be shown in the following chart form:

The chart clearly shows that the four performance objectives have been developed to determine mastery of the "Understanding basic shapes." Here, to achieve or realize the goal of understanding basic shapes, the child must meet all four of the performance objectives.

<table>
<thead>
<tr>
<th>Goal: Understanding Basic Shapes</th>
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<tbody>
<tr>
<td><strong>Performance Objective</strong></td>
</tr>
<tr>
<td>Given sets of the four basic shapes, the child will group like shapes together.</td>
</tr>
<tr>
<td><strong>Performance Objective</strong></td>
</tr>
<tr>
<td>Given a picture of a circle, the child will find three other circular shaped objects in the classroom.</td>
</tr>
<tr>
<td><strong>Performance Objective</strong></td>
</tr>
<tr>
<td>Given one card for each basic shape, the child will name the shape on the card.</td>
</tr>
<tr>
<td><strong>Performance Objective</strong></td>
</tr>
<tr>
<td>Given a ditto having various shapes and a red crayon, the child will color all triangles red.</td>
</tr>
</tbody>
</table>
Goal: Understanding the United States Constitution

<table>
<thead>
<tr>
<th>Performance Objective</th>
<th>Performance Objective</th>
<th>Performance Objective</th>
<th>Performance Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given quotations from the Constitution, the student will correctly list each under the Preamble, Articles, or Amendments.</td>
<td>Without any visual aids, the student will recite each of the Articles in the Bill of Rights.</td>
<td>Using a copy of the Constitution, the student will write a one-page essay translating each of the amendments.</td>
<td>Given a social issue, the student will identify the specific constitutional law that applies.</td>
</tr>
</tbody>
</table>

For any given goal, the chart may be as simple as the prior one, very complex, or someplace in between. It is possible, as in the above example, to require the mastery of several performance objectives to determine that a particular goal has been met. The complexity of the relationship will depend both on the complexity of the goal being assessed and the extent to which the academic department wishes to assess the attainment of the goal.

This procedure for relating performance objectives to goals can be applied to any subject matter area. For example, the chart above shows some of the performance objectives that one may wish students to display toward the less visual goal of understanding the United States Constitution.

If a department develops performance objectives that are related to the important concepts in a major, the objectives will be worthwhile and not based upon trivia.

A PROCESS FOR WRITING GOALS AND OBJECTIVES

When writing performance objectives, it is important to focus on outcomes rather than on processes. For example, in assessing a specific academic program, we need to clearly define what we want all students to know and be able to do upon completion of the program before we can determine the courses that need to be added, revised or deleted or other changes that need to be made to help the program attain its goals.

In his 1984 book entitled Goal Analysis, Robert Mager (Pitman Learning) outlined the following five step process for writing goals and objectives.

**STEP 1:** Get the main ideas down on paper. Don’t worry about the language used at this point. Get the general ideas down on paper. The broad goal is what counts. Place each goal on a separate piece of paper.

**STEP 2:** Identify concrete behavioral expressions of the outcome. For each goal identified in Step 1, list as many words or phrases as you can think of that represent concrete behaviors that would occur if the goal is achieved.

**STEP 3:** Clean up the language used in Step 2. Step 2 concentrated on ideas. Step 3 will concentrate on language. Eliminate duplications and behaviors that do not relate to your desired outcome. Also eliminate statements that are not behaviors.

**STEP 4:** Write complete sentences to describe each outcome. To communicate effectively the meaning of the goal, each objective should be written as a complete sentence and in some cases, more than one sentence.

**STEP 5:** Check for completeness of goal description. Be certain that the series of expected behaviors fully meets the goal. Also be sure that conditions and criteria are clearly stated.