**Quick Guides**

**Academic Units: Goals, Objectives, Outcomes**

**Goals (optional)**

*Definition*: Goals are broad, general statements of what the program, course, or activity intends to accomplish over the long-term. They state in broad terms what the program wants to accomplish or to become over the next several years. Goals should provide a framework for determining the more specific educational objectives of a program, and should be consistent with the mission of the program and the mission of the institution. A single goal may have many specific subordinate learning objectives. Goals are not measurable.

*Note*: Defining goals is optional for UA’s assessment plans. However, some programs use them to help form a bridge between the broad mission statement and the more specific outcomes.

**Elements of Goal or Objective statements**: The general structure of a goal statement is as follows:

“(Action verb) (object) (modifiers)”

**Example:**

- The Department of Philosophy’s goal is to graduate students who are informed and engaged citizens with effective critical thinking skills and excellent written and oral communication skills.

When writing goals, think about what the successful student or graduate knows, what that student can do and what that student cares about. The goal statement should specifically explain the expectations of graduates and the focus should be on student learning and not the teaching activity.

The following checklist will help determine whether the goals for a particular program are effectively and clearly written.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are your goals consistent with the university’s mission?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are your goals consistent with your department or college's goals and mission?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do your goals describe desired performance, values or skills of graduates?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objectives (optional)**

*Definition*: Program objectives are statements about the intentions of the course, program or experiences, i.e., what faculty intend to do to achieve goals and outcomes. Objectives are less specific than outcomes and focus on the intentions of teaching, such as content coverage or focus of disciplinary questions. Objectives are not measurable. Goal statements are very general and are about the long-range intended aims or purposes of education; while objectives are more specific, brief, clear statements of aims or purpose, but not as specific as outcomes.

*Note*: Defining objectives is optional for UA’s assessment plans. However, some programs use them to help form a bridge between the broad mission or goal statements and the more specific outcomes.

When writing program objectives, consider the following:
• What do you want your graduates to know?
• What do you want your graduates to think or care about?
• What do you want your graduates to be able to do?

**Examples:**

• The Bachelor’s in Business Administration Program will graduate students with the technical skills (critical analysis, communication, analytical and computer) and human relations skills (group dynamics, team building, organization and delegation) to enable them to translate knowledge into action.

• The Bachelor’s in Political Science and International Relations Program will graduate students who understand the major theories, concepts, foundations, and methodologies used in the study of politics and international relations.

**Outcomes**

**Definition:** Student learning outcomes (SLOs) are statements that describe observable, measurable learning and behaviors that students have achieved upon completion of a program of study. Student learning outcomes identify what the learner will know and be able to do by the end of a program. Student learning outcomes include the essential knowledge, abilities (skills) and attitudes (values, dispositions) that a graduate of a program needs to have acquired upon completion. It’s not feasible (or necessary) to identify everything graduating students will be able to do. Programs are advised to identify 3-5 key SLOs (these may be informed by specialized accreditation standards and input from alumni or employers.

**What are the differences between Objectives and Outcomes?**

Objectives are about the intentions of instruction, curricula, programs, activities, or experiences. Outcomes are about the expectations, results or consequences of instruction, curricula, programs, activities, or experiences; i.e., evidence that learning took place. Objectives are often written more in terms of teaching intentions and typically indicate the subject content that the program or teacher(s) intends to cover. Learning outcomes, on the other hand, are student-centered and describe what it is that the learner should learn.

**Examples of goals, objectives, and outcome statements:**

• **B.S. in Geology program:**
  Goal: To graduate students with the knowledge, understanding, and skills related to the recognition and interpretation of rock types.
  Objective: To teach students to recognize different magma geochemistries derived from the partial melting of the mantle in different tectonic regimes.
  Outcome: Students will demonstrate how magma geochemistry relates to partial melting of the mantle by contrasting the outcomes of this process in different tectonic regimes through the critical analysis of specific case studies.

• **B.S. in English program:**
  Goal: To introduce students to modes of satiric writing in the eighteenth century.
  Objective: To familiarize students with a number of substantive eighteenth century texts. Students will be trained in the close reading of language and its relation to literary form.
  Outcome: Students will analyze the relationship between the language of satire to literary form by the close examination of a selected number of eighteenth-century texts in a written essay.

**Elements of SLO statements:**

• an action word that identifies the performance to be demonstrated; (such as produce, analyze, demonstrate, discuss, write, etc.) When choosing an action word, think about the type of understanding
students should achieve, whether it is simply remembering or understanding some facts (lower order thinking skills) or being able to evaluate critically or create something original (higher order thinking skills). Using Bloom’s Taxonomy [link] can aid in creating outcomes for different levels of student mastery skills. Click [here] for a list of the Revised Bloom’s Taxonomy process verbs, along with suggested assessment artifacts and question stems for creating effective discussion or test questions.

- a statement that specifies **what learning will be demonstrated** in the performance; (such as demonstrate **design principles**, write a research paper, discuss **philosophical questions**, etc.)
- a broad statement of the **criterion or standard for acceptable performance** (write a research paper in the **appropriate scientific style**, demonstrate design principles to produce meaningful design **recommendations**, discuss philosophical questions to explain the significance of those questions)

Two possible formats of a learning outcome statement are as follows:

- **Format 1**: To (action verb) (object) (target) (modifiers)
- **Format 2**: The (target) (action verb) (modifiers) (object)

**Examples of learning outcome statements:**

The following examples demonstrate how a student learning outcome can be edited to become more meaningful, measurable and manageable (examples adapted from Academic Program Assessment Handbook, *Information, Analysis, and Assessment*, University of Central Florida, 2005).

- **Needs improvement**: Students completing the undergraduate program in Engineering will have knowledge of engineering principles.
  
  This outcome does not specify which engineering principles a graduate from the program should know. Also, it does not define what is meant by “have knowledge”.

- **Effective**: Graduates will demonstrate the principles of engineering design, formulating requirements and constraints, following an open-ended decision process involving tradeoffs, and completing a design addressing an engineering need.
  
  The specific requirements of student learning are listed and the level of competency is also stated. A student must be able to apply and to demonstrate the listed engineering principles.

- **Needs improvement**: PhD students of Engineering will be successful in conducting high-quality research.
  
  Although the quality of research expected from the doctoral students is identified, there is no indication of specific research capabilities that a student should possess.

- **Effective**: Ph.D. graduates of Engineering will conduct high-quality, doctoral research as evidenced by their results of experiments and projects, dissertations, publications, and technical presentations.
  
  What is expected of a doctoral student in this program is clearly defined and stated. The quality of research expected as well as the specific research requirements are articulated in the outcome statement.

- **Needs improvement**: Students should understand the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.
  
  This outcome states what theories students should know, but it does not detail exactly what they should know about each theory, or how they will demonstrate their understanding of it.

- **Effective**: Students will recognize and articulate the foundational assumptions, central ideas, and dominant criticisms of the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.
  
  This outcome provides students an understandable and very specific target to aim for. It provides faculty with a reasonable standard against which they can compare actual student performance.

**Worksheet**

The following writing guidelines, exercise, and checklist of characteristics can assist in developing or reviewing student learning outcomes:
**Checklist: Reviewing SLOs--Well-written SLOs should:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be aligned to the mission (and goal) statements of the institution, school, or department.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus is on intended outcomes that are critical, distinctive, and specific to your program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include concrete action verbs rather than passive verbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describe intended outcomes not actual outcomes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on the learning results, not the learning process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use clear and definite terms when describing the knowledge, abilities, values and attitudes a student who graduates from your program will demonstrate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be simply stated so that outcomes requiring different assessment measures are not bundled into one statement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be framed in terms of the overall program rather than individual courses or individual students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have measurable outcomes with available resources for the collection of accurate and reliable data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stated so that more than one measurement method could be used to assess the outcome.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be stated so that results can be used to identify areas to improve.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exercise for writing effective student learning outcomes:**

1. Describe the successful student who just graduated from a specific academic program in terms of his or her knowledge, skills, values, and attitudes. What would this graduate look like as a result of this program’s curriculum and pedagogy? Try to be as specific and comprehensive as possible when identifying characteristics.
   - What does the successful graduate know and understand?
   - What can the successful graduate do physically or mentally?
   - What does the successful graduate value?

2. Organize knowledge, skill, and attitude (values) characteristics in logical groupings.

3. Now think about which of the characteristics identified for the successful graduate can be directly attributed to the experiences currently presented to them in the program. If experiences to support certain desired characteristics cannot be identified, write that down too (expand or shrink the table as needed).

<table>
<thead>
<tr>
<th>Characteristic of a successful graduate of your program</th>
<th>Attributable Learning Experiences in your program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Characteristics not Addressed by Current Learning Experiences: