**Writing Student Learning Objectives**

Student learning objectives serve as the foundation upon which the assessment plan is

constructed, as assessment methods cannot be crafted before the outcomes are

known. In this message, I would like to provide you with some information about how to develop student learning outcomes.

For the purpose of this discussion, I am defining student learning objectives as specific

statements that describe the knowledge, skills and dispositions that students are

expected to learn as a result of their successful completion of the curriculum. While I will be referring to program student learning objectives, much of what follows is also applicable to student learning objectives at other levels of the curriculum.

**Identifying Student Learning Objectives**

The first three approaches involve reviewing outcomes developed by others and

adapting them to fit your particular curriculum.

1. Your discipline's professional association. Some professional organizations have

already developed a set of student learning outcomes. For example, the Association

of College & Research Libraries have developed student learning outcomes for

information literacy such as, "Differentiates between primary and secondary sources,

recognizing how their uses and importance vary with each discipline."

2. Your discipline's specialized accreditation body. Specialized accreditation

organizations are increasingly stressing the importance of the assessment of student learning. As a result, they may offer a set of learning outcomes or have professional competencies or standards that could be used to develop outcomes.

3. College and university websites and catalogs. Look at outcomes developed by programs similar to your own.

4. Visualize your "ideal" graduate. Think of a graduate who you think exemplifies

what you are trying to accomplish through the learning experiences in your

curriculum. What were the knowledge, skills, and dispositions (values and attitudes)

that you believe the student gained as a result of your curriculum? It is important that all of the faculty within a program work together to develop the student learning outcomes for the program. Also, there should be a logical connection about the program's purpose/mission and its student learning outcomes

**Form and Structure**

Best practices in writing student learning outcomes (SLOs) are summarized below.

1. The SLOs are specific to the program they are associated with.

2. The SLOs focus on what is critical to the program.

3. The SLOs describe the knowledge, skills and dispositions that students are

expected to gain as a result of their completion of the program. Example: "English

graduates are able to…" vs. "The English program provides students with…". The focus is on what students should achieve and not on what faculty is going to do or what the program offers.

4. The SLOs are clear and understandable to both faculty and students.

5. The SLOs are written to an appropriate level of specificity while still allowing a certain amount interpretation leeway so that faculty members can reach consensus. Example: "English graduates are able to critique a brief draft essay pointing out the

grammatical, spelling and punctuation errors and offer appropriate suggestions for

correction of deficiencies" vs. "English graduates know how to provide students with

feedback on written essays". Generally, highly prescriptive curriculums have more specific outcomes while curriculums that allow students a lot of choice in how they meet the requirements usually use broader outcomes.

6. The SLOs use action verbs. It is better to use concrete verbs such as define,

classify or formulate rather than vague verbs like understand or know. Otherwise, it may take more time for faculty to reach consensus about the criteria that need to be

used to determine whether a student "knows" something. A table showing various verbs for knowledge, skills, and dispositions is available below.

7. The SLOs are realistic given the typical student who enters the program, the

expected level of rigor in program courses, and the resources available to support student learning.

8. The SLOs are assessable. It should be feasible to measure the outcome.

One acronym useful to remember when writing goals, objectives or outcomes is S.M.A.R.T. - Specific, Measurable, Acceptable, Realistic and Targeted.



**Examples of Verbs for Student Learning Outcome**

**Knowledge Acquisition and Application**

Add Apply Arrange Calculate Categorize

Change Chart Choose Classify Complete

Compute Construct Count Define Demonstrate

Describe Discover Discuss Distinguish Divide

Dramatize Draw Duplicate Employ Examine

Explain Express Graph Identify Illustrate

Indicate Inform Interpolate Interpret Label List Locate Manipulate Match Memorize Modify Name Operate Order Outline Point Predict Prepare Produce Quote Rank Read Recall Recite Recognize Record Relate Repeat Report Reproduce Restate Review Select Show Solve Specify State Stimulate Subtract Summarize Translate Use

**Higher Order Thinking Skills**

Adapt Analyze Assess Calculate Categorize

Classify Combine Compare Compile Compose

Contrast Create Criticize Defend Design

Devise Diagram Differentiate Dissect Estimate

Evaluate Explain Formulate Generate Group

Infer Integrate Invent Investigate Judge

Justify Modify Order Organize Plan Prescribe Produce Propose Rate Rearrange

Reconstruct Reflect Related Reorganize Research

Review Revise Rewrite Select Separate

Specify Summarize Survey Synthesize Test

Transform

**Psychomotor Skills**

Activate Adapt Adjust Align Alter

Apply Arrange Assemble Calibrate Change

Check Choose Clean Combine Compose

Conduct Connect Construct Correct Create

Demonstrate Describe Design Detect Differentiate

Dismantle Display Dissect Distinguish Employ

Follow Identify Install Isolate Locate

Make Manipulate Measure Operate Originate

Perform Prepare Produce React Rearrange

Relate Remove Reorganize Repair Replace

Respond Revise Select Separate Set

Show Sketch Sort Test Transfer

Troubleshoot Tune Use Vary

**Attitude, Values, & Dispositions**

Accept Acclaim Accommodate Act Adhere Adopt Advocate Alter Answer Applaud

Approve Arrange Ask Assist Associate

Assume Attend Balance Believe Challenge

Change Choose Classify Combine Complete Comply Conform Cooperate Debate Defend Deny Describe Develop Differentiate Display Endorse Enjoy Establish Express Follow

Form Formulate Give Greet Have

Help Hold Identify Influence Initiate

Integrate Interpret Invite Join Judge

Justify Listen Obey Organize Participate

Perform Persuade Practice Present Propose Protest Qualify Question Reflect Report

Resolve Respect Revise Select Serve Share Show Solve Subscribe Support Tell Use Verify Volunteer Weigh

Work