FAQs for Writing Learning Outcomes

What is a Learning Outcome?

- A learning outcome is a statement that describes what a student will know (knowledge), be able to do (skill), and/or value/appreciate (disposition) as a result of a learning experience.
- Learning outcomes can be written for a major/program (departmental outcome or the SUU Essential Learning Outcomes), a course (learning outcomes included on a syllabus), and/or an individual lesson.
- Learning outcomes are phrased in terms of OUTPUTS (student learning) not inputs (what the instructor provides in class or assignments student are required to complete).
- Learning outcomes should be written in the following form including all three components:

  1) Students can/will be able to...
  2) action verb (see back for a comprehensive list of action verbs from Bloom’s Taxonomy)...
  3) specific action/skill they will be able to do (including discipline-specific knowledge, skill, or ability).

How Can Learning Outcomes Enhance Teaching and Learning?

- For each lesson, course, and academic program, instructors are urged to ask:
  - What knowledge, skills, and/or dispositions do I want students to get from this?
  - What evidence can I gather to show that students are getting it?
- Because learning outcomes must be observable/measurable, evidence can be produced to demonstrate what students are actually learning.
- Assessment evidence provides valuable data for improving instruction and increasing student learning in courses and programs.

Examples of Well-Written Learning Outcomes:

- Students will be able to read, interpret, and analyze common reference maps.
- Students will be able to apply critical thinking skills to offer a solution to a real-world problem.
- Students can create narratives about the past based on primary source documents.
- Students can explain the relationship between genetics and disease risk.
- Students can choreograph a dance reflecting a specific dance style.

Common Mistakes Made When Writing Learning Outcomes:

- Using vague verbs that are difficult to measure like “appreciate,” “be aware of,” “learn,” “understand,” or “know.” How will you know if students appreciate, understand, or know? Use specific action verbs—you will know that students understand if they can: explain, describe, summarize, analyze, compare, evaluate, apply, etc.
- Writing learning outcomes that describe inputs like assignments or lecture content rather than the learning that will occur because of the assignment or lecture. “Students will read essays by significant philosophers of the 19th Century” describes reading assignments students will complete (inputs), but does not describe what students will know, be able to do, or value, as a result of completing the readings (outcomes).
- Including too many learning outcomes. The best target for the number of learning outcomes for a course or program is 2 – 4. (Note: 1 learning outcome is acceptable if it is very rich, and 5 or 6 are acceptable if you can make a really strong argument for greater than four.) Learning outcomes are meant to be broader learning goals targeting important knowledge, skills and dispositions, not a comprehensive listing of discreet skills or bits of knowledge.
### BLOOM'S TAXONOMY (Revised 2001)
Learning Outcome Action Verbs at Each Bloom Taxonomy Level

<table>
<thead>
<tr>
<th>Cognitive Level</th>
<th>Illustrative Action Verbs</th>
<th>Definitions</th>
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</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>arrange, define, describe, duplicate, identify, label, list, match, memorize, name, order, outline, recognize, relate, recall, repeat, reproduce, select, state</td>
<td>remembering previously learned information</td>
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<tr>
<td>Comprehension</td>
<td>classify, convert, defend, discuss, distinguish, estimate, explain, express, extend, generalize, give example(s), identify, indicate, infer, locate, paraphrase, predict, recognize, rewrite, report, restate, review, select, summarize, translate</td>
<td>grasping the meaning of information</td>
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<tr>
<td>Application</td>
<td>apply, change, choose, compute, demonstrate, discover, dramatize, employ, illustrate, interpret, manipulate, modify, operate, practice, predict, prepare, produce, relate schedule, show, sketch, solve, use write</td>
<td>applying knowledge to actual situations</td>
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<tr>
<td>Analysis</td>
<td>analyze, appraise, breakdown, calculate, categorize, classify, compare, contrast, criticize, derive, diagram, differentiate, discriminate, distinguish, examine, experiment, identify, illustrate, infer, interpret, model, outline, point out, question, relate, select, separate, subdivide, test</td>
<td>breaking down objects or ideas into simpler parts and seeing how the parts relate and are organized</td>
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<tr>
<td>Synthesis</td>
<td>arrange, assemble, categorize, collect, combine, comply, compose, construct, create, design, develop, devise, explain, formulate, generate, plan, prepare, propose, rearrange, reconstruct, relate, reorganize, revise, rewrite, set up, summarize, synthesize, tell, write</td>
<td>rearranging component ideas into a new whole</td>
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<tr>
<td>Evaluation</td>
<td>appraise, argue, assess, attach, choose, compare, conclude, contrast, defend, describe, discriminate, estimate, evaluate, explain, judge, justify, interpret, relate, predict, rate, select, summarize, support, value</td>
<td>making judgments based on internal evidence or external criteria</td>
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