STUDENT LEARNING OUTCOMES

Best Practices

Basic Elements of a Student Learning Outcome (SLO)

<table>
<thead>
<tr>
<th>emphasis on student</th>
<th>observable, &quot;action&quot; verb</th>
<th>learning statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>will identify</td>
<td>three potential career options that are compatible with their skills, values, and interests.</td>
</tr>
<tr>
<td>Students</td>
<td>will develop</td>
<td>a student expense budget listing expenses and available resources.</td>
</tr>
<tr>
<td>Students</td>
<td>can explain</td>
<td>at least three of the most important social issues facing the population they served.</td>
</tr>
</tbody>
</table>

Practical Considerations

1. Start Where You Are
   * Use existing program/unit documents as the starting point.
   * Tailor outcomes from other institutions or NASPA/CAS to suit your program/unit.

2. Meaningful & Important
   * Focus on the central aspects of your program/unit and those that are most meaningful and important.
   * Place the emphasis on students—what they will be able to know, or value—not on what services, activities, or information are provided.

3. "Action" Verbs
   * Use verbs that describe the knowledge, skills, and cognitive/developmental changes students should be able to demonstrate because of participation in your program/unit.

4. Be Realistic
   * Keep the learning outcomes to a reasonable number (3-5).
   * Include only those learning outcomes that your program/unit can reasonably and directly address.
   * Avoid jargon; students and others should be able to understand the outcomes.
   * Because all outcomes must be assessed, create outcomes that observable or measureable.

5. Collaborate
   * Collaborative development and collective acceptance of program/unit outcomes provides focus and a common direction for program/unit personnel.

6. Publicize
   * Once outcomes are collaboratively developed and collectively accepted, they need to be shared!

~ continued ~
Bloom’s Taxonomy

Bloom’s taxonomy is a well-known description of levels of educational objectives. It may be useful to consider this taxonomy when creating outcomes.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>To know specific facts, terms, concepts, principles, or theories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>To understand, explain</td>
</tr>
<tr>
<td>Application</td>
<td>To apply knowledge to new situations, to solve problems</td>
</tr>
<tr>
<td>Analysis</td>
<td>To identify parts, relationships, and organizing principles; To identify the organizational structure of something</td>
</tr>
<tr>
<td>Synthesis</td>
<td>To create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme</td>
</tr>
<tr>
<td>Evaluation</td>
<td>To judge the quality of something based on its adequacy, value, logic, or use</td>
</tr>
</tbody>
</table>

“Action” Verbs

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>cite</td>
<td>arrange</td>
<td>apply</td>
<td>analyze</td>
<td>arrange</td>
<td>appraise</td>
</tr>
<tr>
<td>define</td>
<td>classify</td>
<td>carry out</td>
<td>break down</td>
<td>assemble</td>
<td>assess</td>
</tr>
<tr>
<td>duplicate</td>
<td>convert</td>
<td>change</td>
<td>calculate</td>
<td>collect</td>
<td>check</td>
</tr>
<tr>
<td>find</td>
<td>defend</td>
<td>compute</td>
<td>categorize</td>
<td>combine</td>
<td>choose</td>
</tr>
<tr>
<td>identify</td>
<td>describe</td>
<td>construct</td>
<td>compare</td>
<td>compile</td>
<td>compare</td>
</tr>
<tr>
<td>indicate</td>
<td>diagram</td>
<td>demonstrate</td>
<td>contrast</td>
<td>compose</td>
<td>conclude</td>
</tr>
<tr>
<td>know</td>
<td>discuss</td>
<td>discover</td>
<td>criticize</td>
<td>construct</td>
<td>contrast</td>
</tr>
<tr>
<td>label</td>
<td>distinguish</td>
<td>dramatize</td>
<td>debate</td>
<td>create</td>
<td>criticize</td>
</tr>
<tr>
<td>list</td>
<td>estimate</td>
<td>employ</td>
<td>deconstruct</td>
<td>design</td>
<td>critique</td>
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<tr>
<td>match</td>
<td>explain</td>
<td>execute</td>
<td>determine</td>
<td>devise</td>
<td>decide</td>
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<tr>
<td>memorize</td>
<td>extend</td>
<td>illustrate</td>
<td>diagram</td>
<td>formulate</td>
<td>discriminate</td>
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<tr>
<td>name</td>
<td>generalize</td>
<td>implement</td>
<td>differentiate</td>
<td>generate</td>
<td>evaluate</td>
</tr>
<tr>
<td>outline</td>
<td>give examples</td>
<td>interpret</td>
<td>discriminate</td>
<td>invent</td>
<td>experiment</td>
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<tr>
<td>recall</td>
<td>infer</td>
<td>investigate</td>
<td>distinguish</td>
<td>manage</td>
<td>grade</td>
</tr>
<tr>
<td>recognize</td>
<td>locate</td>
<td>manipulate</td>
<td>examine</td>
<td>modify</td>
<td>hypothesize</td>
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<td>record</td>
<td>outline</td>
<td>operate</td>
<td>illustrate</td>
<td>perform</td>
<td>interpret</td>
</tr>
<tr>
<td>repeat</td>
<td>paraphrase</td>
<td>practice</td>
<td>infer</td>
<td>plan</td>
<td>judge</td>
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<tr>
<td>reproduce</td>
<td>report</td>
<td>predict</td>
<td>inspect</td>
<td>prepare</td>
<td>justify</td>
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<tr>
<td>reproduce</td>
<td>restate</td>
<td>prepare</td>
<td>interrogate</td>
<td>produce</td>
<td>measure</td>
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<tr>
<td>retrieve</td>
<td>review</td>
<td>produce</td>
<td>inventory</td>
<td>propose</td>
<td>rate</td>
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<tr>
<td>state</td>
<td>suggest</td>
<td>schedule</td>
<td>organize</td>
<td>rearrange</td>
<td>score</td>
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<tr>
<td>underline</td>
<td>summarize</td>
<td>shop</td>
<td>outline</td>
<td>reconstruct</td>
<td>select</td>
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<tr>
<td></td>
<td>translate</td>
<td>sketch</td>
<td>question</td>
<td>reorganize</td>
<td>support</td>
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<tr>
<td></td>
<td></td>
<td>solve</td>
<td>relation</td>
<td>revise</td>
<td>test</td>
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<tr>
<td></td>
<td></td>
<td>translate</td>
<td>use</td>
<td></td>
<td>value</td>
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</table>

Alternative Headings

<table>
<thead>
<tr>
<th>Remembering</th>
<th>Understanding</th>
<th>Applying</th>
<th>Analyzing</th>
<th>Creating</th>
<th>Evaluating</th>
</tr>
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