Year One
Session Three: Writing Good Learning Outcomes Statements

Remember...

- “How well do we accomplish our educational intentions?”

- “How do we know?”

(Adapted from Maki, 2004)
Goals? Outcomes?

- "Goals state what you, your colleagues, or your institution aim to achieve."
  - Program-centered

- "Learning outcomes…are the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience."
  - Participant-centered

~ Suskie (2004)
### Cornell Educational Objectives

<table>
<thead>
<tr>
<th>Cornell Educational Objectives</th>
<th>Department / Program Goals</th>
<th>Intended Student Outcomes</th>
</tr>
</thead>
</table>
| **Two:** Understand the methods and practices of the natural sciences, social sciences, arts, and humanities:  
  - as a result of their experiences with various methods of inquiry, graduates will recognize and apply different disciplinary and interdisciplinary forms of thinking;  
  - as a result of their experiences with a major or concentration, graduates will possess depth of understanding and research skills in at least one method of inquiry; | Every Biology major will successfully complete a core curriculum of 5 courses and a set of 3 electives.  
Over the course of their junior and senior years, at least 75% of majors will attend a science-oriented conference. | (Biology): "Graduating seniors will be able to conduct original scientific research and present it in writing and orally to a scientific audience." (Walvoord, 2004) |
| **Three:** Possess intercultural knowledge and recognize global perspectives; | 50% of students will study off-campus | "Students will demonstrate the ability to perceive any given event from more than one cultural viewpoint." (Global Learning for All, 2009) |
| **Four:** Integrate and transfer knowledge and skills from one setting to another; | | |
| **Five:** Be cognizant of their responsibility for individual, civic, and social choices | 100% of graduating seniors will have participated in community service | |

### Student Learning Outcomes

- Translate intentions into actions.
- Describe what students should demonstrate or produce.
- Use *action* verbs.
Bloom’s Taxonomy

### Cognitive

<table>
<thead>
<tr>
<th>Level</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>define, describe, identify, know, recognize, recall</td>
</tr>
<tr>
<td>Comprehension</td>
<td>comprehend, convert, explain, distinguish</td>
</tr>
<tr>
<td>Application</td>
<td>compute, construct, modify, predict, use, solve, relate</td>
</tr>
<tr>
<td>Analysis</td>
<td>compare, contrast, deconstruct, differentiate, analyze</td>
</tr>
<tr>
<td>Synthesis</td>
<td>compile, compose, explain, revise, reconstruct, combine</td>
</tr>
<tr>
<td>Evaluation</td>
<td>appraise, compare, conclude, critique, defend, interpret</td>
</tr>
</tbody>
</table>

Bloom (1956)

---

### Affective

<table>
<thead>
<tr>
<th>Level</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving phenomena</td>
<td>ask, describe, select, follow, select</td>
</tr>
<tr>
<td>Responding to phenomena</td>
<td>answer, assist, conform, discuss</td>
</tr>
<tr>
<td>Valuing</td>
<td>demonstrate, justify, differentiate, initiate</td>
</tr>
<tr>
<td>Organization</td>
<td>adhere, formulate, arrange, relate</td>
</tr>
<tr>
<td>Internalizing values</td>
<td>act, display, influence, question</td>
</tr>
</tbody>
</table>

*Krathwohl, Bloom, Masia (1973)
Student Learning Outcomes

- Align with other intentions (institutional, departmental, etc.).
- Map to practices.
- Are collaboratively authored.
- Reflect / complement existing national criteria.
- Can be measured.

~ Maki (2004)

SMART Outcomes

- **Specific**: Clear and definite terms describing expected abilities, knowledge, values, attitudes, and performance.
- **Measurable**: It is feasible to get the data; data are accurate / believable; can be assessed in more than one way.
- **Aggressive but Attainable**: Consider stretch targets to improve programs.
SMART Outcomes

- **Realistic**: Take note of the timeframe and the resources you have available.
- **Time-bound**: Describe where you would like students to be within a specified period of time.

Adapted from Paula Krist, Director of Operational Effectiveness and Assessment Support, University of Central Florida, May 2006.

Individual Exercise

- **For your area**:
  - Make a list in your own words of what students are learning.
  - Write a “quick and easy” learning outcome.
    
    By the end of this [program], students will…
    (think / feel / do differently)
Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>cognitive</th>
<th>affective</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge</td>
<td>receiving phenomena</td>
</tr>
<tr>
<td>comprehend</td>
<td>responding to phenomena</td>
</tr>
<tr>
<td>application</td>
<td>valuing</td>
</tr>
<tr>
<td>analysis</td>
<td>organization</td>
</tr>
<tr>
<td>synthesis</td>
<td>internalizing values</td>
</tr>
<tr>
<td>evaluation</td>
<td>appraise, compare, conclude, critique, defend, interpret</td>
</tr>
</tbody>
</table>

- **Posting….**
- **Feedback**
  - Specific
  - Measurable*
  - Attainable
  - Realistic
  - Time-bound
Questions & Concerns

Next Time

Goals / Outcomes Workshop & Presentation

December 3rd
3:30-4:45 p.m.
Hedges
Next Time

Before:
- Document your *draft* outcomes. Or, if you have made revisions, document your *revised* outcomes.
- Share your *draft* and/or *revised* department / program outcomes with your colleagues.
- Seek program consensus on the outcomes.

Preparation:
- Submit *goals* and *outcomes* documents to Becki by December 1st.
- Review shared documents.