Charting Your Course: Student Learning Outcomes and Course Design

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Three Guiding Questions:

- 1. What do you want student to learn by taking your course? (outcomes)
- What activities and assignments do you have them do so that they can achieve the course outcomes? (student work or assignments)
- 3. How will you evaluate whether they've achieved your outcomes? (your evaluation criteria or assessment)

Outcomes and other terms

- Outcomes: faculty expectations for student learning by the end of a course or program. Often outcomes begin with the phrase "Students will be able to..." but they need not. Ex. Students will construct clear and cogent arguments in their term papers.
- **Course objectives:** traditional focus on what the course covers or what the faculty intends to accomplish. Ex. This class provides an overview of the methods typically found throughout the research literature in our field.
- Be aware: there are many terms used interchangeably with "outcomes" across different divisions, such "objectives," and "goals." (Refer to three handouts)

Course Outcome Characteristics

- Quality of outcomes: student-focused, manageable in number, measurable, focused on learning that endures, aligned with program outcomes and discipline expectations.
- Types of outcomes: knowledge, skills, values
 - You will be able to identify and explain major social identity theories.
 - You will be able to construct and orally present a persuasive and wellorganized thesis addressing a major issue in the field.
 - You will be able to evaluate and reasonably defend your position relative to assumptions and implications of different ethical concepts and perspectives.

Developmental level of outcomes

Outcome Developmental Complexity



- **6. Create:** assemble, construct, create, design, develop, formulate, invent
- **5. Evaluate:** appraise, argue, defend, judge, select, support, value, evaluate
- **4. Analyze:** appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test
- **3. Apply:** choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write
- **2. Understand:** classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
- **1. Remembering:** define, duplicate, list, memorize, recall, repeat, reproduce, state

Program-level Learning Outcomes

- Students majoring in chemistry or biochemistry will demonstrate understanding of fundamental chemical concepts through performance on assignments and exams (lecture setting) and laboratory experiments and reports (laboratory setting).
- Students will develop the ability to critically evaluate theories, methods, principles, and applications of psychology.
- Students will demonstrate an ability to compare and contrast different cultures, points of view, and social systems through the analysis of historical and contemporary approaches to theatre and performance.
- Students will be able to distinguish ethical from unethical behavior across various business contexts.
- Students will integrate mathematical, physical, chemical and biological principles to better understand the functioning of biology systems.
- Students should demonstrate advanced practice on theoretical foundations and research [graduate].

Activity 1

- Find program-level outcomes for your department or program (handouts) and consider how your course outcomes are aligned with these.
- Select one of your outcomes to discuss with your neighbor. Consider the following:
 - Quality (student-focused, manageable in number, measurable, focused on learning that endures, aligned with program outcomes and discipline expectations)
 - Type of outcome (knowledge, skill, value)
 - Developmental level (refer to Bloom's taxonomy)
 [Break]

Assignment Design

1. What do you want student to learn by taking your course? (outcomes)

 What activities and assignments do you have them do so that they can achieve the course outcomes? (student work or assignments)

3. How will you evaluate whether they've achieved your outcomes? (your evaluation criteria or assessment)

Assignment Alignment Examples

- **Biology Outcome**: synthesize a cogent argument in the language of science
- Biology Assignment: lab reports written in style of scientific journal
- Ethics Outcome: identify and analyze real world ethical problems or dilemmas and identify those affected by the dilemma.
- Ethics Assignment: essay assignment which demonstrates analysis of a real world problem and its consequences for various groups of people.

Assignment Alignment & Activity 2

- Aligned with one or more course outcomes (e.g., critical analysis and writing practice)
- Prompts students to produce evidence of those outcomes clearly and effectively.
 - Enough opportunities
 - Ample feedback
- Aligned with evaluation criteria derived from learning outcomes.

Activity 2:

- Identify an assignment that you could use to test achievement for one of your outcomes.
- Discuss with neighbor alignment and evidence of outcomeachievement.

Course Design

1. What do you want student to learn by taking your course? (outcomes)

 What activities and assignments do you have them do so that they can achieve the course outcomes? (student work or assignments)

3. How will you evaluate whether they've achieved your outcomes? (your evaluation criteria or assessment)

Evaluation Criteria: Key Characteristics

- Valid: are criteria directly related to course outcome?
- **Reliable:** can they be applied consistently?
- Flexible: do they capture the different levels of student performance?
- Fair: do they help to ensure that the criteria stay the same for all students?

Evaluation Criteria: Rubrics

Writing Skills	LEVEL 3	LEVEL 2	LEVEL 1
Organization			
Thesis Support			
Mechanics			

Evaluation Criteria

Activity 3:

- Work with partner and select assignment from activity 2.
- Using rubric matrix (handout), identify highest level assignment characteristics for level 3 in the first column (think developmentally!)
- With the same matrix, identify the lowest level of assignment characteristics in the last column.
- Fill in the middle column.
- Using the key characteristics, how would you critique your evaluation criteria?

Course Disconnects

- Problems between outcomes and assignments
- Problems between assignments and evaluation criteria
- Problems between evaluation criteria and outcomes

Backing up to the bigger picture

- For a cohesive learning environment, alignment occurs at many levels:
- Institutional mission, goals, and outcomes: curricular & co-curricular umbrella
- College or School mission, goals, and outcomes: broad curricular & co-curricular umbrella such as the core curriculum
- Program mission, goals, and outcomes: department's curricular umbrella
- Course purpose and outcomes: umbrella structure for a course

Contact us!

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