DEVELOPING STUDENT LEARNING AND PROGRAM OUTCOMES
CREATING MEASURABLE AND MEANINGFUL STATEMENTS FOR IMPROVEMENT

INSTITUTIONAL EFFECTIVENESS
OFFICE OF ANALYTICS AND INSTITUTIONAL EFFECTIVENESS
TODAY’S AGENDA

- Why outcomes?
- Alignment
- Types of outcomes
- Program outcomes
- Student learning outcomes
- Distinguishing outcomes between degree programs
WHY DO PROGRAMS NEED STUDENT LEARNING AND PROGRAM OUTCOMES?

- Make informed evidence-based changes to the curriculum, program, or student learning
- Focus student learning as core to the educational mission
- Engage faculty in collective ownership of the curriculum, the process of institutional effectiveness, and the use of evidence (not anecdotes) to improve student learning
- Articulate the value of the program to stakeholders (e.g., interested students, accreditation agencies, graduate schools, etc.)
- Inform students as to what they are expected to achieve
- Help clarify/reinforce the mission of the program
- Meet SACSCOC or discipline-specific accreditation standards
Mission: The College of Communication and Fine Arts creates an environment conducive to understanding the complex phenomena of art and art making as well as human communication in all its diverse forms.

Goal: Students will have a full understanding of the historical, spiritual, and cultural context of works.

Student learning outcomes:

- Students will articulate clear ideas about art and its historical and contemporary significance.
- Students will analyze works of art and architecture within appropriate historical, social, religious, and cultural contexts.

Adapted from the Loyola Marymount University Office of Assessment website: https://academics.lmu.edu/officeofassessment/
ALIGNMENT IS IMPORTANT!

**Mission:** Through a comprehensive education in the science of psychology, the Psychology Department seeks to educate the whole person, pursue academic excellence, advance scholarship, promote service and justice, and encourage life-long learning.

**Program outcomes:**

- Students who complete the B.S. in Psychology will be enrolled in a graduate program or employed in a position relevant to the degree within one year of graduating.
- Graduate students in Psychology will publish in a peer-reviewed journal related to the field at least once while enrolled in the program.

Adapted from the Loyola Marymount University Office of Assessment website: https://academics.lmu.edu/officeofassessment/
**WHAT IS THE DIFFERENCE BETWEEN PROGRAM OUTCOMES AND STUDENT LEARNING OUTCOMES?**

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<th><strong>Program outcomes</strong></th>
<th><strong>Student learning outcomes</strong></th>
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<td><strong>Definition</strong></td>
<td>Reflect the services the program provides OR outline specific student achievement areas of the program (e.g., retention, graduation rates, etc.).</td>
<td>Reflect the knowledge, skills, abilities, or competencies that students are expected to acquire as a result of being in the program.</td>
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<td><strong>Example</strong></td>
<td>Full-time students who declare XYZ as a major will complete the program in 4 years.</td>
<td>Graduates will be able to explain how past events in the area of XYZ impact society now.</td>
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HOW MANY OUTCOMES SHOULD YOU HAVE AND HOW OFTEN SHOULD YOU MEASURE THEM?

- Programs should have a mix of student learning and program outcomes.
  - 5 to 8 student learning outcomes
  - 2 to 3 program outcomes
  - Programs with discipline-specific accreditation requirements (e.g., ABET, AACSB, etc.) might have more outcomes
- Each program should measure at least 2-3 student learning outcomes and 1-2 program outcomes every year.
- All outcomes should be measured at least twice in five years.
Certificate programs should have:
- 2 to 4 student learning outcomes
- 1 to 2 program outcomes

Certificates should measure at least one student learning outcome and one program outcome each year.

All outcomes should be measured at least twice in five years.
WHAT MAKES A GOOD PROGRAM OUTCOME?

- A program outcome:
  - Defines program metrics or services
  - Focuses on what your program wants to accomplish or a service it provides
  - Specifies program student achievement areas

- A good program outcome:
  - Is a specific action, behavior, or achievement
  - Can be validly and reliably measured
  - Is related to the program’s mission and can be achieved or improved upon if not achieved
  - Is meaningful to the program
GOOD PROGRAM OUTCOMES ARE SMART

**Specific**
- Clear and unambiguous
- What is to be accomplished? How is it accomplished?
- Who is involved?

**Measureable**
- Clear criteria for measurement

**Achievable**
- The outcome can reasonably be achieved

**Relevant**
- It matters to the improvement of the program

**Time Sensitive**
- Bound by a period of time (when appropriate)
WHAT ARE EXAMPLES OF GOOD PROGRAM OUTCOMES?

- Examples of measurable, specific, and feasible program outcomes:
  - The MA program will develop new courses to meet discipline-specific accreditation requirements.
  - The department of XYZ will increase its graduation rate by 10% within five years.
  - Within two years of graduating from the program, students will obtain state teaching licensure.
WHAT MAKES A GOOD STUDENT LEARNING OUTCOME?

A student learning outcome:
- Is a specific behavior or knowledge that students are expected to be able to demonstrate as a result of the program
- Focuses on what you want students to know or be able to do
- Completes the statement: “Students will be able to…”

A good learning outcome:
- Addresses an observable, attainable behavior
- Is narrowly focused
- Is measurable
- Is stated at the appropriate cognitive level for the degree or expectations of the program
(Bloom’s taxonomy: https://cft.vanderbilt.edu/2010/04/blooms-revised-taxonomy-a-framework-for-assessing-student-learning/)
Bloom’s Taxonomy (Revised)

- Creating: Can the student create a new product or point of view?
  - assemble, construct, create, design, develop, formulate, write

- Evaluating: Can the student justify a stand or decision?
  - appraise, argue, defend, judge, select, support, value, evaluate

- Analyzing: Can the student distinguish between different parts?
  - appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test

- Applying: Can the student use information in a new way?
  - choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write

- Understanding: Can the student explain ideas or concepts?
  - classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase

- Remembering: Can the student recall or remember the information?
  - define, duplicate, list, memorize, recall, repeat, state

http://rayhightower.com/blog/2015/03/20/blooms-taxonomy-for-learning/
THE ABCD’S OF LEARNING OUTCOMES

**Audience**
- Who are the learners?
- Identifies who it is that will be doing the performance

**Behavior**
- What will the learner be able to do?

**Condition**
- Under what circumstances/context will the learning occur?

**Degree**
- How much will be accomplished and how well will the behavior be done?
WHAT ARE EXAMPLES OF GOOD STUDENT LEARNING OUTCOMES?

- Examples of measurable, observable student learning outcomes:
  - Students in the Physics program will be able to explain one practical application of the XYZ theory.
  - Art History students will be able to describe the style and form used in paintings by Monet.
  - Upon completion of the BA in Anthropology students will be able to explain the logic of the four-field approach to American anthropology.
  - Conservation Biology students will be able to evaluate prominent ethical dilemmas of research in the field.
EXAMPLES OF OUTCOMES THAT ARE NOT MEASURABLE

- Ask yourself, “How would a student provide evidence of the concept?”

- Students will be able to appreciate contemporary dance.
  - Better: Students will be able to evaluate the style and form used in contemporary dance.

- Students will comprehend the importance of major philosophical figures.
  - Better: Students will be able to describe the importance of major philosophical figures.

- Students will learn techniques fundamental to the practice of forensics.
  - Better: Students will be able to effectively apply fundamental forensic techniques.
EXAMPLES OF OUTCOMES THAT ARE NOT MEASURABLE

- Students will understand the theory of evolution.
  - Better: Students will be able to explain the theory of evolution.

- Students will know the impact of human activities on the environment.
  - Better: Students will be able to analyze the impact of human activities on the environment.

- Students will be able to critically listen to a composition by Johann Sebastian Bach.
  - Better: Students will be able to interpret the common melodic and rhythmic structures of a Bach composition.

- *It is important to remember that just because an outcome is measurable it may not be reasonable to assess.*
Distinguishing outcomes goes beyond establishing different measures

Think about Bloom’s taxonomy- cognitive levels are key

Departments with several degree programs (e.g., B.S., M.S., and Ph.D.; M.S. and M.B.A; Ed.D. and Ph.D.) should develop outcomes that distinguish one program from another

A program might have three or four common outcomes for both M.S. and Ph.D. students but would have a few that are specific to each degree level
DISTINGUISHING OUTCOMES BETWEEN DEGREE PROGRAMS

Example: M.S. and Ph.D. program in Clinical Psychology

- M.S. outcome #1 and Ph.D. outcome #1: Apply psychological theories and scientific knowledge of psychopathology in case conceptualization.
- M.S. outcome #2 and Ph.D. outcome #2: Discuss the role of the therapeutic alliance in psychological treatment.
- M.S. outcome #3: Discuss the role of individual differences, culture, and context in the conduct of psychological research.
- Ph.D. outcome #3: Effectively perform clinical interviews for assessment and diagnosis.

Outcomes from http://gsep.pepperdine.edu/doctorate-clinical-psychology/learning-outcomes
TIPS FOR WRITING ALL OUTCOMES

- Be as specific as possible

- Avoid double-barreled outcomes

- Focus on active verbs/behaviors

- Develop as many as needed, but don’t go overboard
QUESTIONS?

VISIT THE INSTITUTIONAL EFFECTIVENESS WEBSITE AT AIE.VT.EDU