INSTITUTIONAL EFFECTIVENESS: STUDENT LEARNING OUTCOMES
(Abbreviated Version)

Opening Activities
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Office of Planning, Assessment & Research
Student Learning Outcomes

CAU faculty have a critical role in the *Institutional Effectiveness* process through:

- Identification of **desired learning outcomes** for programs and courses
- Development of **appropriate assessments** to document learning
- Review of **assessment data** to identify the extent of student learning
- Implementation of **appropriate changes** to improve the quality of student learning at CAU
What are Learning Outcomes?

- **Learning outcomes** define the goals of learning experiences (activities, courses, majors, curricula, engagement with post-secondary education)

- What any student should be able to do, know, or value as a result of engaging in that learning experience

- Not the same as satisfaction with education, professors, facilities, activities, or experiences

- Not the same as outputs, such as grades, GPA, retention rate, graduation rate

- Outcomes define impact – how the student has changed

- The achievement of learning outcomes (student success) measures **Institutional Effectiveness**
Learning Outcomes at Different Levels

- **Course Level (CLOs):** Students who complete this course can calculate and interpret a variety of descriptive and inferential statistics

  - Courses should be designed to align with CLOs. CLOs should align with PLOs consistent with the curriculum map

- **Program Level (PLOs):** Students who complete the Psychology program can use statistical tools to analyze and interpret data from psychological studies

  - PLOs should align with relevant School LOs and ILOs

- **School Level (SLOs):** Students who graduate in business can apply quantitative methods to business-related problems

  - If School LOs are real, every student in that School should have systematic learning opportunities to master them

- **Institutional Level (ILOs):** Graduates from our campus can apply quantitative reasoning to real-world problems.

  - If ILOs are really institution-wide, every student should have systematic learning opportunities to master them, regardless of which course choices they make.

- Does your campus have ILOs? If yes, does your program have corresponding PLOs?
- Does your School have LOs? If yes, does your program align with them?
- Do CLOs in your program align with PLOs consistent with your curriculum map?
Educational Objectives

- Statements that describe the expected accomplishments of graduates during the first few years after graduation

Learning Outcomes

- Statements that describe what students are expected to know, think, and be able to do by the time of graduation
Educational Objectives

- Broad
- Long-term
- What do we expect our graduates to accomplish in broader society as a result of program’s education?
- 3-5 per program

Learning Outcomes

- Focus on the end result of your program
- How do you know the students have learned what you want them to learn?
- What does it look like?
- How will you identify it?
- 5-8 per program
What are Student Learning Outcomes? (SLOs)

- Statements that specify what learners will know, be able to do or be able to demonstrate when they complete or participate in a program/activity/course/project.

- Outcomes are expressed as knowledge, skills, attitudes or values.
Student Learning Outcomes

Outcomes specify an action by the student that must be:

- Measurable or observable
- Meaningful and able to be demonstrable
- Manageable

Specific
Achievable
5-8 per program
Think of the “ideal” students or graduates

- What students know?
- What students care about (think)?
- What students can do?

What should a CAU graduate in (program name) know and be able to do?

- Do they know it?
- How do I know?
- How does this information help improve the quality of my program at CAU?
Student Learning Outcomes

Use simple, specific action verbs to describe what the students are expected to demonstrate upon completion of your program. (Use Bloom’s Taxonomy)

Action verbs result in overt behavior that can be observed and measured. Sample action verbs are:

- Analyze, apply, argue, arrange, assemble, assess, calculate, categorize, choose, classify, compare, compile, compute, create, criticize, critique, defend, define, demonstrate, describe, design, develop, differentiate, discuss, distinguish, estimate, examine, explain, formulate, identify, illustrate, indicate, interpret, label, list, locate, manage, memorize, order, operate, organize, plan, practice, predict, prepare, propose, question, rate, recognize, repeat, report, reproduce, review, revise, schedule, select, solve, state, translate, use, utilize, write

Certain verbs are unclear and call for covert, internal behavior which cannot be observed or measured. These types of verbs should be avoided:

- Appreciate, become aware of, become familiar with, know, learn, understand
<table>
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<tr>
<th>BLOOM’S TAXONOMY CATEGORIES</th>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
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<tr>
<td>DEFINITION</td>
<td>Recalling or remembering something without necessarily understanding, using, or changing it</td>
<td>Understanding something that has been communicated without necessarily relating it to anything else</td>
<td>Using a general concept to solve problems in a particular situation; using learned material in new and concrete situations</td>
<td>Breaking something down into its parts; may focus on identification of parts or analysis of relationships between parts, or recognition of organizational principles</td>
<td>Creating something new by putting parts of different ideas together to make a whole</td>
<td>Judging the value of material or methods as they might be applied in a particular situation; judging with the use of definite criteria</td>
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<th>ACTION VERBS</th>
<th>Information Gathering</th>
<th>Confirming Information Gathering</th>
<th>Making Use of Knowledge</th>
<th>Taking Apart</th>
<th>Putting Together</th>
<th>Judging the Outcome</th>
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<tr>
<td></td>
<td>Define, Describe, Draw Identify, Label, Locate Memorize, Name, Recite, Recognize, Select, State, Write</td>
<td>Change, Confirm, Express, Illustrate, Match, Paraphrase, Restate, Transform</td>
<td>Apply, Change, Choose, Classify, Collect, Discover, Dramatize, Draw, Interpret, Make, Model, Modify, Paint, Prepare, Produce, Report, Show</td>
<td>Analyze, Compare, Differentiate, Examine, Point out, Select, Subdivide, Survey, Take apart, Categorize, Construct, Distinguish, Infer, Investigate, Research, Separate, Classify, Contrast</td>
<td>Add to, Combine, Construct, Create, Design, Develop, Formulate, Hypothesize, Invent, Organize, Originiate, Plan, Produce, Role-Play, What if</td>
<td>Apprise, Assess, Compare, Consider, Criticize, Critique, Judge, Recommend, Relate, Solve, Summarize, Weigh</td>
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<tr>
<th>ACTIVITIES</th>
<th>Information Gathering</th>
<th>Confirming Information Gathering</th>
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<td>A definition, A dictionary, Events, Films, Magazine articles, Newspapers, People, Radio, Recordings, Television shows, Text reading, Video</td>
<td>Analogy, Causal relationships Conclusion or implication based on data, Outline, Summary</td>
<td>Creating… A cartoon, A drama, A film strip, A forecast, A list, A map, A meeting, A mobile, A painting, A project, A puzzle, A question, Diagram, Illustration, Photographs, Sculpture, Solution, A paper which follows an outline, Shifting smoothly from one gear into another</td>
<td>Break down an argument, Draw a conclusion, Graph, Identify parts of a propaganda statement, Model, Questionnaire, Report, Survey, Syllogism</td>
<td>A play, Poem, Article, Report, Book, Song, Carbon, Story, Game, Invention, Formulate a hypothesis or question, Set of rules, principles, or standards, Speculate on or plan an alternate course of action</td>
<td>Comparison of standards, Conclusion, Court Trial, Editorial, Establishment of standards, Evaluation, Group Discussion, Recommendation, Self-Evaluation, Survey, Valuing</td>
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Student Learning Outcomes

Evaluate your learning outcomes with these questions:

✓ Can it be measured?
✓ Is learning being demonstrated?
Examples

1. Students will appreciate the benefits of exercise.
2. Students will value exercise as a stress reduction tool.
3. Students will be able to explain how exercise affects stress.
Student Learning Outcomes

Examples

Too general and hard to measure
- Students will appreciate the benefits of exercise.

General and hard to measure
- Students will value exercise as a stress reduction tool.

Specific and easy to measure
- Students will be able to explain how exercise affects stress.
Student Learning Outcomes

Assessment of Learning Outcomes

- A variety of appropriate methods are used
- The selected assessment measures the extent the outcome has been achieved
- Assessment is meaningful
- Assessment guides program changes to improve quality of the program
Appropriate measures of Learning Outcomes include:

**Direct Measures** (all students)
- Capstone projects/senior projects
- Samples of student work
- Project-embedded assessment
- Observations of student behavior (internships)
- Performance on a case study/problem
- Pre- and post-tests

**Indirect Measures** (sample)
- Alumni, employer, student surveys
- Focus groups
- Job placement statistics
- Exit interviews with graduates
Learning Outcomes: Guidelines

- Aligned with mission statements
- Program level
- Stated from student perspective
- Intended/expected learning outcomes (will)
- Specific
- Can be measured by multiple methods

1. Identify 5-8 student learning outcomes for your program to serve as benchmark assessments for completion of your program
2. Write outcomes that are Measurable, Manageable, and Meaningful
3. Identify 2 appropriate assessment strategies for each learning outcome (at least one direct)
4. Develop a scoring guide/rubric
5. Identify the criteria for success
6. Identify the course/s where assessment will occur
## Sample Learning Outcomes Matrix

<table>
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<tr>
<th>Learning Domains (Areas of Competency)</th>
<th>Proficiency Statements</th>
<th>Proficiency Descriptions</th>
<th>Curriculum Requirements</th>
<th>Assessment Procedures</th>
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<tr>
<td><strong>I - Communication Skills</strong></td>
<td>CAU students will write clear, grammatically correct, substantive compositions using various writing strategies (e.g., descriptive, argumentative, cause and effect, etc.). CAU students will speak effectively in various situations, using language and tone that are appropriate to the purpose of the speech and the audience addressed.</td>
<td>The student: - Uses Standard Written English, including spelling, capitalization, punctuation and basic grammatical elements - Develops paragraphs coherently and effectively - Uses supporting details or examples that are relevant and sufficient - Writes appropriately for different occasions, audiences and purposes - Applies correctly the rules of attribution and citation (follows the specified style guide)</td>
<td>CENG 105 College Composition I CENG 106 College Composition II Emphasis on writing across core curriculum</td>
<td>CENG 106 Exit Exam Essay MAPP Writing (ETS)</td>
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<td></td>
<td></td>
<td>The student: - Speaks in acceptable English with unity of thought - Describes concisely and clearly events or situations - Recounts verbally the main ideas of discussions or presentations - Enunciates/articulates clearly - Exhibits an awareness of voice and body affect oral communication</td>
<td>CSTA 101 Fundamentals of Speech Emphasis on speaking across core curriculum</td>
<td>CSTA 101 Exit Assessment (TBD)</td>
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Learning Outcomes: Timeline

February, March
- Identify program learning outcomes
- Identify appropriate assessments
- Determine success standards
- Identify course/s to administer assessments

April
- Submit document to Department Chair for review
- Submit to Dean for review

May
- Dean submits all program reports to Provost Office

Fall 2011
- Begin development of course learning outcomes to support program learning goals
- Develop course matrix
- Program assessment begins

Spring 2012
- First assessment cycle complete
- Data review and analysis reports compiled

Fall 2012
- Assessment loop continues