UNIVERSITY OF CENTRAL FLORIDA

S.O.S.: Student Outcomes Solutions for Program Assessment

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AGENDA

- Overview and Purpose
- Definitions:
  - Program Assessment
  - Student Learning Outcomes
- Assessment Standards across Organizations
- Writing Student Learning Outcomes
  - Mapping to Accrediting Agencies
  - You try it!
  - Issues in measurement of SLO's

Definitions

- Program Assessment: setting and assessing objectives that will promote program improvement
- Student Learning Outcomes: those objectives that define and assess student growth in a program

SACS
Principles of Accreditation

Quality Enhancement

"The concept of quality enhancement is at the heart of the Commission's philosophy of accreditation; this presumes each member institution to be engaged in an ongoing program of improvement and able to demonstrate how well it fulfills its stated mission."

SACS Comprehensive Standards

3.3.1 *Institutional Effectiveness*

"The institution identifies expected outcomes for its educational programs and its administrative and educational support services; assesses whether it achieves these outcomes; and provides evidence of improvements based on analysis of those results."

Program Specific Accrediting Bodies

- ABET: Accreditation Board for Engineering and Technology
- AACSB: Association to Advance Collegiate Schools of Business
- NCATE: National Council for Accreditation of Teacher Education

ABET Criterion 3: Program Outcomes and Assessment

Specifies a list of categories (a-k) of student learning outcomes for engineering programs to address.

AACSB: Maintenance Report

4. Assessment Tools and Procedures

"A brief statement of learning goals of each degree program, along with a list of assessment tools, procedures, and results used to demonstrate progress toward an achievement of the mission."

NCATE's Mission

"Through standards that focus on systematic assessment and performance-based learning, NCATE encourages accredited institutions to engage in continuous improvement based on accurate and consistent data."

NCATE: Specialized Program Associations Standards

"All SPAS, however, must include required assessments that address the 5 following areas:…

5. An assessment that demonstrates candidate effect on student learning, or (for non-teaching fields) the ability to create supportive learning environments."

Student Learning Outcomes: Think SMART

- Specific
- Measurable
- Attainable & Aggressive
- Results-Oriented
- Timely

SPECIFIC

- Outcome is associated with discipline-specific knowledge, skill, belief or attitude; communication skill(s); and/or critical thinking proficiency.
- Outcome is distinctive and specific to the program.

MEASURABLE

- Assessment associated with the outcome should be stated in measurable terms.

ATTAINABLE & AGGRESSIVE

- Outcome should indicate reasonable stretch targets.
- Outcome should allow for variation in student abilities.

RESULTS-ORIENTED

- The outcome should help to identify where program improvements are needed.
  - Example: examine sub-scales of a standardized test for a specialized area or competency

TIMELY

- The outcome should specify when the student will achieve the given knowledge, skill or behavior or attitude.

Developing Student Learning Outcomes

ABET Criterion 3:k:

an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Developing Student Learning Outcomes

ABET Criterion 3:k SLO

Aerospace engineering graduates will demonstrate the ability to use equipment to determine and control aircraft attitude.

Developing Student Learning Outcomes

AACSB: Undergraduate Business

"includes learning experiences in such general knowledge and skill areas as:

Communication abilities…"

Developing Student Learning Outcomes

AACSB: Undergraduate SLO

At the end of the junior year in the B.B.A. program, students will demonstrate proficiency in oral presentation skills.

Developing Student Learning Outcomes

NCATE: Standard 1

"Candidates preparing to work in schools as teachers or other professional school personnel know and demonstrate the content, pedagogical, and professional knowledge, skills, and dispositions necessary to help all students learn."

Developing Student Learning Outcomes

NCATE: Standard 1 SLO

Teacher candidates accurately assess and analyze student learning.

Your Turn

1. At the back of the handouts select:
   - ABET: Engineering
   - AACSB: Business
   - NCATE: Education

2. Develop a student learning outcome that addresses one of the criteria and is S.M.A.R.T.

Student Learning Outcomes: Think SMART

- Specific
- Measurable
- Attainable & Aggressive
- Results-Oriented
- Timely

MATURE: Measuring Student Learning Outcomes

- Match
- Appropriate methods
- Target
- Useful
- Reliable
- Effective and Efficient

MATCH

- The measures match the specific knowledge, skill, behavior, value outcome, communication outcome, or critical thinking outcome that is expected.

APPROPRIATE METHODS

- Choose measurement approaches that are appropriate:
- **direct measures:** direct examination or observation of student knowledge, skills, or attitudes against measurable learning outcomes
- **indirect measures:** perceived extent or value of learning experiences

TARGET

- Each measure should indicate the desired level of performance.
  - E.g., All students will score 80% or higher on the group of questions that test knowledge of correct procedures to follow when using the lab.

USEFUL

- Measures help identify the areas for program improvement.

RELIABLE

- Measures are based on tested, known methods.

EFFECTIVE & EFFICIENT

- Each approach accurately and concisely measures the outcome.

Program Assessment Measures

direct measures

- standardized exams
- locally developed exams
- external examiner
- oral exams
- portfolios (with rubrics)
- behavioral observations
- simulations
- project evaluations
- performance appraisals

indirect measures

- surveys and questionnaires:
  - student perception
  - employer perception of program
- exit and other interviews
- focus groups
- student records

Contact Information

Operational Excellence & Assessment Support Website:

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