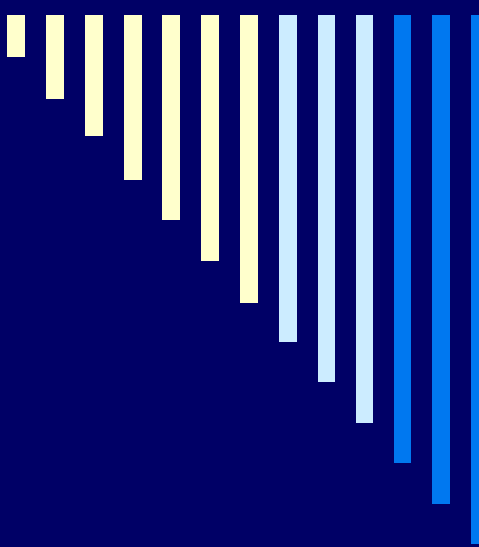




UNIVERSITY OF CENTRAL FLORIDA



***Program Assessment:
Academic Learning Compacts***

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AGENDA

- ❑ Program Assessment
- ❑ Academic Learning Compacts
- ❑ Writing student learning outcomes:
SMART
- ❑ Measuring to assess student learning
outcomes: MATURE
- ❑ Assessment Mapping





Program Assessment

Two purposes:

1. Improve operations and processes
2. Assess student learning outcomes
 - Academic Learning Compacts



Academic Learning Compacts

Concepts:

- ❑ Academic programs should be able to show that students have a standard set of competencies at graduation.
- ❑ Students and programs should have an understanding of what those are and how they will be measured.



Academic Learning Compacts

- ❑ Communication
- ❑ Critical Thinking
- ❑ Discipline-specific knowledge, skills, attitudes & behaviors



Academic Learning Compacts

Communication:

Communication skills include reading, speaking, writing, editing, questioning, listening, making presentations, and interpersonal relations. Some programs have additional modalities and/or techniques.





Academic Learning Compacts

Critical Thinking:

outcome activities that require analysis, synthesis and evaluation.





Academic Learning Compacts

Critical thinking involves:

- ❑ identifying problems in a situation or organization
- ❑ thinking about the complexity of problems
- ❑ gathering evidence through research
- ❑ evaluating options to solve the problem
- ❑ deriving a conclusion or solution.





Academic Learning Compacts

Discipline-specific knowledge, skills, attitudes and behaviors vary by discipline and can vary by level, major or program.



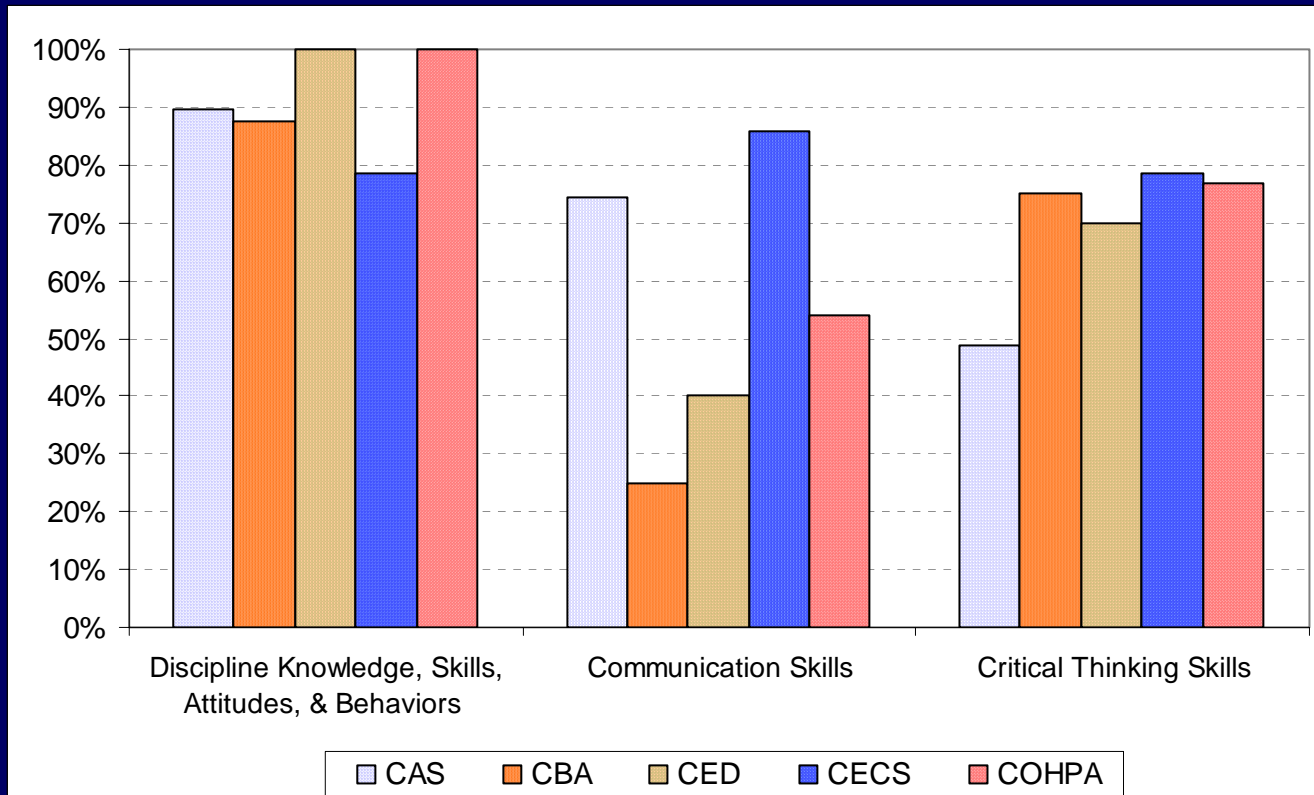
Academic Learning Compacts

All programs should have 8 – 12 specific Student Learning Outcomes that address:

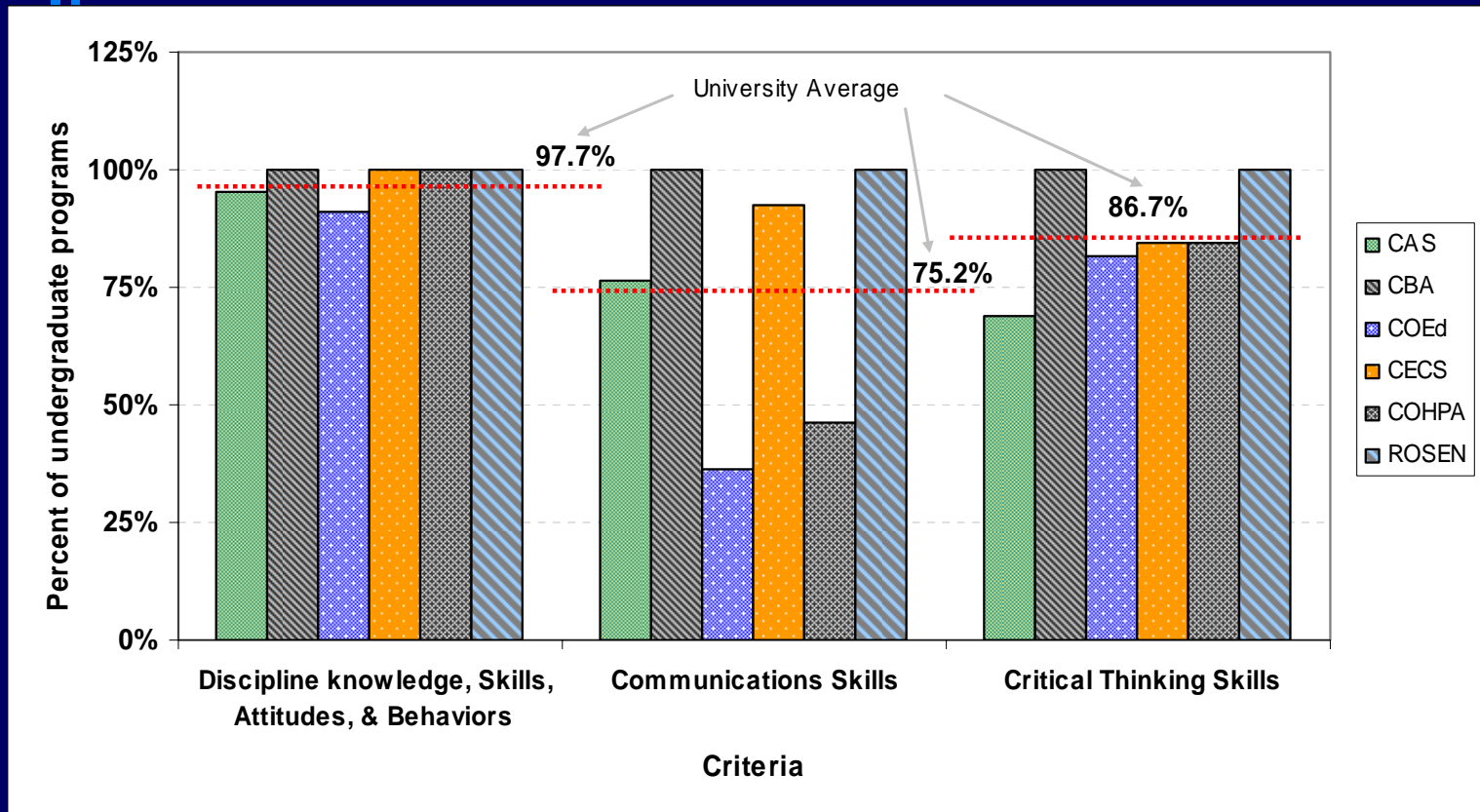
- ❑ Communication
- ❑ Critical Thinking
- ❑ Discipline-Specific knowledge, skills, values and behaviors



Percent of 2003-2004 undergraduate programs with Academic Learning Compact Outcomes



Percent of 2004-2005 undergraduate programs with Academic Learning Compact Outcomes





Student Learning Outcomes: Think SMART

- ❑ Specific
- ❑ Measurable
- ❑ Attainable and Aggressive
- ❑ Results-Oriented
- ❑ Timely



SPECIFIC

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



MEASURABLE

- ❑ Objectives 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

- ❑ Should help to identify where program improvements are needed.
 - Example: examine sub-scales of a standardized test for a specialized area or competency to be sure it is addressed in the curriculum



TIMELY

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



Examples of Student Learning Outcomes

Communication student learning outcome:
Graduates of the BS program in Imaginary Science will demonstrate proficiency in oral communication of the kind expected in professional paper presentations.



Examples of Student Learning Outcomes

Critical Thinking student learning outcome:
Graduates of the BS program in Hypothetical Engineering will accurately solve problems that address engineering economics issues such as life-cycle analysis.



Examples of Student Learning Outcomes

Discipline-Specific knowledge, skills, values and behaviors student learning outcome:

Graduates of the BS program in Global Education will apply the 10 fundamental principles of effective teaching (*list them*).





MATURE: Measuring Student Learning Outcomes

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





MATCH

- ❑ The measures match the specific communication outcome, critical thinking outcome, or discipline knowledge, skill, behavior, or attitude 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 100% 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
- embedded questions
- external examiner
- oral exams
- minute papers
- portfolios (with rubrics)
- behavioral observations
- simulations
- project evaluations
- performance appraisals

indirect measures

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



Linking Learning Outcomes and Measures

Communication Student Learning Outcome:

Graduates of the BS program in Imaginary Science will demonstrate proficiency in oral communication of the kind expected in professional paper presentations.

Measure 1: In the Capstone Course EG4321, each student will earn at least 90% on the presentation section of their capstone project. A scoring rubric will be used to assess elements of communication proficiency for specific skills.





Linking Learning Outcomes and Measures

Communication student learning outcome:

Graduates of the BS program in Imaginary Science will demonstrate proficiency in oral communication of the kind expected in professional paper presentations.

Measure 2: On the graduating senior survey, at least 90% of program respondents will indicate that the program has increased their oral communication proficiency.





Linking Learning Outcomes and Measures

Critical Thinking student learning outcome:
Graduates of the BS program in Hypothetical Engineering will accurately solve problems that address engineering economics issues such as life-cycle analysis.

Measure 1: Each student will demonstrate proficiency by earning a minimum grade of 80% on the question(s) dealing with engineering economics on a test administered in CVE 2037.

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Linking Learning Outcomes and Measures

Critical Thinking student learning outcome:

Graduates of the BS program in Hypothetical Engineering will accurately solve problems that address engineering economics issues such as life-cycle analysis.

Measure 2: In the engineering economics sub-group of the FE examination administered twice every year, our students will equal or exceed the national average. All students are required to take this examination.





Linking Learning Outcomes and Measures

Discipline-Specific knowledge, skills, values and behaviors student learning outcome:

Graduates of the BS program in Global Education will apply the 10 fundamental principles of effective teaching (*list them*).

Measure 1: All students will demonstrate a 90% accuracy in the identification and application of the 10 fundamental principles of effective teaching within a comprehensive paper targeting a hypothetical classroom situation. A scoring rubric will be used for assessment.





Linking Learning Outcomes and Measures

Discipline-Specific knowledge, skills, values and behaviors student learning outcome:

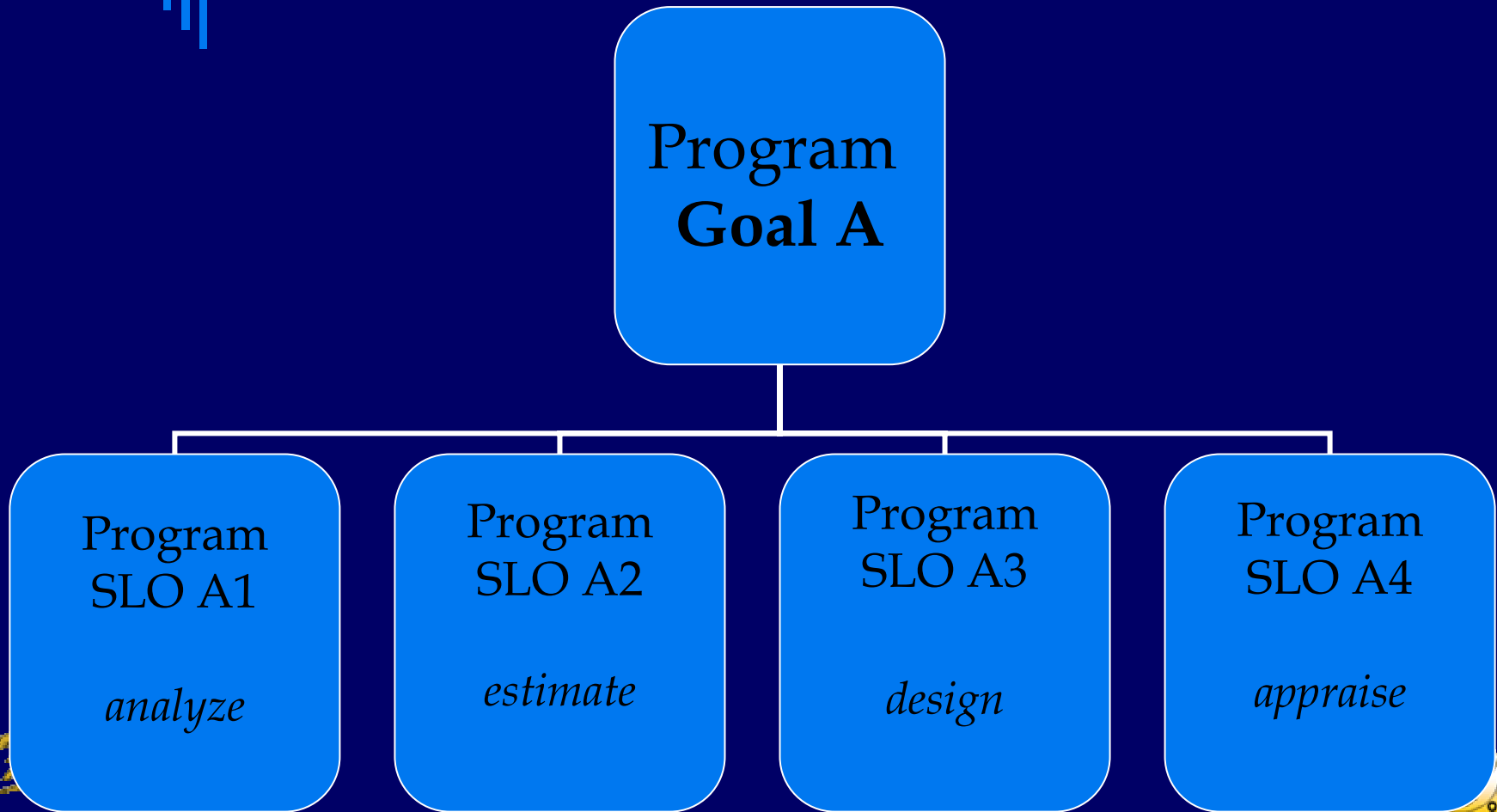
Graduates of the BS program in Global Education will apply the 10 fundamental principles of effective teaching (*list them*).

Measure 2: For the final project in the Capstone Course, ED4567, each student will earn at least a 90% in the integration of the 10 fundamental principles within the project. The integration criteria will be specified in a scoring rubric.

Faculty Center



Program Assessment Mapping



Program Assessment Map

| SLO's | Course I | Course II | Course III | Course IV | Capstone Course |
|--------|-----------------------------|------------------------------|----------------------------|---------------------------|-------------------------------|
| SLO A1 | I <i>classify</i> | E <i>design</i> | | | R <i>analyze</i> |
| SLO A2 | I <i>define</i> | | | E <i>choose</i> | R <i>design</i> |
| SLO B1 | I <i>predict</i> | | E <i>examine</i> | E <i>apply</i> | R <i>synthesize</i> |
| SLO B2 | | I <i>translate</i> | E <i>specify</i> | R <i>plan</i> | R <i>evaluate</i> |
| SLO B3 | | | | | |

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Example Assessment Map

| SLO's MARKETING | 3230 Intro | 3391 Selling | 3503 CB | 3613 Research | 3641 Intel | 4803 Mgmt |
|---------------------------|---------------|-----------------|------------|------------------|---------------|--------------|
| Comm. Abilities | | X | | X | X | X |
| Ethical Reasoning | | X | X | X | | X |
| Analytical Skills | X | | | X | X | X |
| Use of Info Technology | | | X | X | X | |
| Diversity Issues | | | X | | | |



Individual Differences

Not all students who are assessed on the measures for your student learning outcomes will do well, unless they have met individual course and class expectations as they moved through the program.

- Assessment Plan can include remarks or provisions.





Where to begin

CQI Assessment plans are available at:

http://iaaweb.ucf.edu/oeas/phase2/view_plans_results.asp

Other assessment help is available at:

<http://www.oeas.ucf.edu>

