Advanced Organizer

Why
- Cite at least three reasons why identifying and measuring student learning outcomes matters.

What
- Define “student learning outcomes.”
- Identify the essential elements of student learning outcomes.
- Assess the quality of stated student learning outcomes.

How
- Define three categories for assessment.
- Explain good assessment practices.
- Identify various assessment methods.
Please respond to the following question using your iClicker:

Which of the following motivates you the most to improve student learning in your course or program?

A = Opportunity to collaborate with faculty in my department
B = Opportunity to collaborate with faculty in other areas
C = Seeing a measurable improvement in student learning
D = Compliance with accreditation floats my boat
E = Discovering what works and what does not
Please respond to the following question using your iClicker:

Rate your level of knowledge and experience with the identification and assessment of student learning outcomes:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Expert I know all there is to know</td>
</tr>
<tr>
<td>B</td>
<td>Experienced I know enough to be dangerous</td>
</tr>
<tr>
<td>C</td>
<td>Intermediate I know enough to know I don’t know it all</td>
</tr>
<tr>
<td>D</td>
<td>Beginner I kind of know what this is about</td>
</tr>
<tr>
<td>E</td>
<td>Novice I’ve never heard any of this stuff before</td>
</tr>
</tbody>
</table>
What is assessment?
What is Assessment?

- Student Learning Outcomes
- Evidence that outcomes are addressed
- Using data to make improvements
- Dialogue about interpretation of data
Institutional Mission

Institutional Learning Goals

Program Purpose Statements
Broad statement that describes the overall role of a degree or key component area as it relates to the institutional mission and goals.

Departmental Purpose Statements
Broad statement that describes the overall role of a specific department as it relates to the program purpose.

Departmental Objectives
Course Level Student Learning Outcomes | Operational Objectives
The Assessment Loop

1. Develop or modify student learning outcomes
2. Design curriculum & measure student learning
3. Collect data, analyze and discuss
4. Determine adjustments based on data
5. Develop or modify a course, curriculum, or program
Assessment enables us to:

- Showcase quality teaching and learning.
- Link courses together in a coherent sequence.
- Open up dialogue about what was taught, why it was taught, standards, expectations, etc.
- Improve curriculum where needed.
- Challenge students to take ownership of their learning.
Please respond to the following question using your iClicker:

Which of the following threatens you the most?

A = I’m not a miracle worker!
B = Why should I be accountable for students who don’t care or don’t want to succeed?
C = Afraid assessment data will be used against me.
D = Are you kidding? I don’t feel threatened.
Reframe.

- Assessment is not about you.
- Assessment is not about teaching.
- Assessment is not about revealing what is wrong with teaching.
- Assessment is about students.
- Assessment is about learning.
- Assessment is about improving student learning.
The SLO Paradigm Shift

• No longer should we ask, “What content will I cover in this class?”

• Rather, the question becomes, “What will the students learn?”
Why.

- It is required by external forces.
- If we don’t do it for ourselves, someone will do it for us.
- It is the right thing to do.
The institution engages in ongoing, integrated, and institution-wide research-based planning and evaluation processes that (1) incorporate a systematic review of institutional mission, goals, and outcomes; (2) result in continuing improvement in institutional quality; and (3) demonstrate the institution is effectively accomplishing its mission.
The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of the results in each of the following areas....
Southern Association of Colleges & Schools

- 3.3.1.1 - educational programs, to include student learning outcomes
- 3.3.1.2 - administrative support services
- 3.3.1.3 - educational support services
- 3.3.1.4 - research within its educational mission, if appropriate
- 3.3.1.5 - community/public service within its educational mission, if appropriate
(a) Each public institution of higher education shall review and evaluate its core curriculum every ten years on the schedule that accords with the institution's accreditation reaffirmation self-study report to the Southern Association of Colleges and Schools or its successor, and report the results of that evaluation to the Board.
(b) Each institution's evaluation report must contain at least the following:

(3) a description of the processes and procedures used to evaluate the institution's core curriculum; and

(4) a description of the ways in which the evaluation results are being or will be utilized to improve the core curriculum at the institution.
A workforce education program has a competency-based curriculum organized to educate industry-driven learning outcomes. These outcomes are measured in terms of appropriate skills, knowledge, and perspectives mastered by a student to enter a profession related to the program’s career pathway.
### WECM Course

**Design and Creation of Games**

<table>
<thead>
<tr>
<th>CIP</th>
<th>Rubric</th>
<th>Number</th>
<th>Course Title</th>
<th>Status</th>
<th>Semester Credit Hrs</th>
<th>Min Cont Hrs</th>
<th>Max Cont Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0304</td>
<td>GAME</td>
<td>1306</td>
<td>Design and Creation of Games</td>
<td>Active</td>
<td>3</td>
<td>48</td>
<td>96</td>
</tr>
</tbody>
</table>

**Course Level:** Introductory

**Course Description:** Introduction to game and simulation development. Includes analysis of existing applications and creation of a game using an existing game engine. In-depth coverage of the essential elements of game design. Also covers an overview of cultural history of electronic games, survey of the major innovators, and examination of the trends and taboos that motivate game design.

**End-of-Course Outcomes:** Summarize the evolution of the electronic game industry; explain essential game and simulation elements; evaluate the strengths and limitations of game and simulation systems; identify programmatic and graphical elements of a development system; and develop a concept document and simple game.

**Lab Recommended**

**CIP Code Description:** 10.0304 (Animation, Interactive Technology, Video Graphics and Special Effects)

**Year:** 2009
Per Official Memo on August 19, 2011:

“As part of an effort to improve the ACGM and statewide course transfer, Board staff are engaged in a project to develop student learning outcomes for some of the most frequently used courses in the manual. The courses currently being developed are part of the following six disciplines: Economics, English Composition, English Literature, Government, History, and Mathematics.”
Texas Higher Education Coordinating Board
Academic Course Guide Manual (ACGM)

Per Official Memo on August 19, 2011:

“Faculty groups from these disciplines have reviewed course syllabi from two-year and four-year public institutions and developed new course descriptions and learning outcomes for eventual inclusion in the ACGM. Toward that goal, we invite you to ask your faculty to review and comment upon these draft descriptions and outcomes. The public comment period will begin August 19, 2011 and will end on September 19, 2011.”
Per Official Memo on August 19, 2011:

http://www.thecb.state.tx.us/index.cfm?objectid=DE96F52A-D583-AE1B-C7265EA2CD5E90B3

Please email your comments to Ms. Linda McDonough at Linda.McDonough@thecb.state.tx.us, and she will collect the comments and prepare them for a final review by the faculty work groups. The faculty work groups will make any final adjustments that they deem necessary, after which Board staff will convey the course materials to the ACGM Advisory Committee for consideration for addition to the ACGM during their meeting in October.
We have to...

SACSCOC
• CR 2.1
• CS 3.3.1

THECB
• TAC
• GIPWE
• WECM
• ACGM
If we don’t, someone else will.

- Massive standardized testing would not benefit the rich higher education system in the United States.
- Could subject us to strict governmental control.
If we don’t, someone else will.

Faculty and administration TOGETHER must take ownership and responsibility and we must be leaders in the retention of peer review processes.
“If we undertake assessment just for the purpose of demonstrating accountability, we waste our time. We must do assessment in a way that we are getting information that faculty can actually use...”

-- Trudy Banta
It is the right thing to do.

“It is imperative to define what students must know, think and do and understand as a result of instruction; teaching must match these expectations; assessment must be aligned with knowledge, understanding and skill identified as learning outcomes.”

-- Carol Ann Tomlinson
It is the right thing to do.

- communicate clear expectations about what’s important in a course or program
- inform them that they will be evaluated in a consistent and transparent way
- reassure them that there is common core content across all sections of a course
- allow them to make better decisions about programs based on outcomes results
It is the right thing to do.  

Benefits for Faculty

Answers the question:
Did my students learn what I wanted them to learn?
It is the right thing to do.

Benefits for Faculty

- help faculty determine what's working and what's not working in their courses or programs
- facilitates valuable interdisciplinary and intercampus discussions
- provide powerful evidence to justify needed resources to maintain or improve programs
- allows faculty to tell their story to individuals outside their area (e.g. administrators, politicians, employers, prospective students, transfer institutions)
It is the right thing to do.

Benefits for Faculty

- provide reassurance that all faculty teaching a particular high demand course
- agree to address certain core content
So what is a “Student Learning Outcome”? 
So what is a “Student Learning Outcome”?

“A particular level of knowledge, skills and abilities that a student has attained at the end (or as a result) of his/her engagement in a particular set of collegiate experiences.” (Gorman)
So what is a “Student Learning Outcome”?

- Statements that specify what students will know, be able to do or be able to demonstrate when they have completed or participated in a program/activity/course/project.

- Statements of performance expectations in three broad domains – Cognitive, Psychomotor & Affective.
A SLO is NOT

A statement of an intent/desired positive change that has nothing to do with student learning but is related to operations or management.
Example: Increase enrollment in online courses.

A personal goal
Example: Be able to participate in three physical activities each week.
A SLO is NOT

An expectation
Example: ...turn in assignments by due date

A list of textbook chapter titles.
Differentiating between Goals – Objectives – Outcomes

<table>
<thead>
<tr>
<th>Course Goal</th>
<th>Course Objectives</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The purpose of the course.</td>
<td>• Course content and activities</td>
<td>• What a student will be able to know, think or do at the end of the course.</td>
</tr>
</tbody>
</table>
Differentiating between Goals – Objectives – Outcomes

Course Goal

• The goal of this nutrition course is to prioritize key nutrition behaviors, identify health and nutrition needs, and integrate these behaviors into health interventions, educational training, and policy.
### Course Objectives

- Review nutritional recommendations and components.
- Discuss differences in nutritional requirements associated with sex, age, and activity.
- Describe causes and consequences of nutritional problems.
Differentiating between Goals – Objectives – Outcomes

Learning Outcome

- A student will be able to analyze a documented nutritional problem, determine a strategy to correct the problem, and write a draft nutritional policy addressing the broader scope of the problem.
Please respond to the following question using your iClicker:

Students will analyze information and create a graph that is correctly titled and labeled, appropriately designed, and accurately emphasizes the most important data content.

A = Goal
B = Objective
C = Outcome
Please respond to the following question using your iClicker:

Students will understand that individuals (and their families) must be regarded uniquely as individuals with many contributing variables such as multicultural issues.

A = Goal
B = Objective
C = Outcome
iClicker Survey

Please respond to the following question using your iClicker:

This course will develop perspectives on GIS for representing data, information, knowledge – interplay among reality, database, and map display.

A = Goal
B = Objective
C = Outcome
Writing SLOs

• The hardest part....just getting started.
• The big secret...you are already doing this!
Two key questions to start with.

- What is it I want my students to know, think or do?
- How will I know they “got it?”
Then think about…

the 5-7 most important things a student should leave your class being able to do.
<table>
<thead>
<tr>
<th>Then brainstorm...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes or values developed as a result of this course</strong></td>
</tr>
<tr>
<td><strong>Skills or performance ability as a result of this course</strong></td>
</tr>
<tr>
<td><strong>Knowledge and concepts they will have as a result of this course</strong></td>
</tr>
</tbody>
</table>
a SMART approach

- Specific
- Measurable
- Acceptable
- Realistic
- Targeted

SOURCE: Morningside.edu
Specific

- Related to a particular course or program
- Describe the knowledge, skills or disposition that students are expected to gain as a result of completing a course or program
Realistic

- Considers expected level of rigor in the course
- Considers typical entering student
- Resources available to support student learning
Acceptable

- Clear & understandable by both faculty and students
- Uses concrete action verbs
- Are measurable
- Are meaningful
Targeted

- Learner centered.

- Focus on what is critical to a course or program.
Action verbs result in *overt* behavior that can be *observed* and *measured*. 
Action Verbs

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
Importance of Action Verbs

- Certain verbs are unclear and call for covert, internal behavior which cannot be observed or measured.
- These types of verbs should be avoided
Please respond to the following question using your iClicker:

What is wrong with the following outcome?
“Students will understand problem solving and conflict resolution skills.”

A = Nothing
B = No action verb
C = Too general
D = Not measurable
E = B, C & D
What is wrong with the following outcome?
“Design experiments and interpret data according to the scientific method in order to evaluate a hypothesis.”

A = Nothing
B = Uses jargon
C = Not specific
D = Includes hidden expectations
E = B, C & D
What is wrong with the following outcome?

Students will be able to (a) approach the scientific method in a variety of ways; (b) formulate questions; (c) design experiments that answer the questions; and (d) manipulate and evaluate the experimental data to reach conclusions.

A = Nothing
B = Uses jargon
C = Not specific
D = Includes hidden expectations
E = B, C & D
Three Domains of Learning

Cognitive
Psychomotor
Affective

Bloom’s Taxonomy
Cognitive Domain

Knowledge
Recognize or remember information

Comprehension
Grasps the meaning behind the information

Application
Use information to fit another situation with minimal guidance

Analysis
Discriminates, organizes and scrutinizes

Synthesis
Creatively apply knowledge to integrate concepts

Evaluation
 Judges information based on standards, criteria, values and opinions
Psychomotor Domain

**Observe**
Translate sensory input into physical tasks or activities

**Model**
Replicate a fundamental task or skill

**Recognize Standards**
Identify standards important to perform a task or skill correctly

**Correct**
Use standards to evaluate own performance and make corrections as needed

**Apply**
Use in real life situation

**Coach**
Able to instruct or train others
Affective Domain

Receiving
Willingness to hear – become aware of an attitude, value or behavior

Responding
Willingness to react – exhibit change as a result of exposure to an attitude, value or behavior

Valuing
Demonstrating commitment or involvement

Organization
Determine new value or behavior is important or a priority

Characterization
Integrate persistent behavior
<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cite</td>
<td>Convert</td>
<td>Apply</td>
<td>Analyze</td>
<td>Assemble</td>
<td>Access</td>
</tr>
<tr>
<td>Label</td>
<td>Define</td>
<td>Chart</td>
<td>Compare</td>
<td>Create</td>
<td>Appraise</td>
</tr>
<tr>
<td>List</td>
<td>Describe</td>
<td>Compute</td>
<td>Contrast</td>
<td>Construct</td>
<td>Conclude</td>
</tr>
<tr>
<td>Enumerate</td>
<td>Discuss</td>
<td>Demonstrate</td>
<td>Correlate</td>
<td>Design</td>
<td>Critique</td>
</tr>
<tr>
<td>Identify</td>
<td>Estimate</td>
<td>Determine</td>
<td>Diagram</td>
<td>Develop</td>
<td>Decide</td>
</tr>
<tr>
<td>Imitate</td>
<td>Explain</td>
<td>Dramatize</td>
<td>Dissect</td>
<td>Formulate</td>
<td>Defend</td>
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<tr>
<td>Match</td>
<td>Generalize</td>
<td>Establish</td>
<td>Differentiate</td>
<td>Generate</td>
<td>Diagnose</td>
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<tr>
<td>Name</td>
<td>Identify</td>
<td>Make</td>
<td>Distinguish</td>
<td>Hypothesize</td>
<td>Evaluate</td>
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<tr>
<td>Quote</td>
<td>Illustrate</td>
<td>Manipulate</td>
<td>Infer</td>
<td>Initiate</td>
<td>Judge</td>
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<tr>
<td>Recall</td>
<td>Locate</td>
<td>Prepare</td>
<td>Investigate</td>
<td>Invent</td>
<td>Justify</td>
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<tr>
<td>Reproduce</td>
<td>Paraphrase</td>
<td>Project</td>
<td>Limit</td>
<td>Modify</td>
<td>Rank</td>
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<tr>
<td>State</td>
<td>Restate</td>
<td>Solve</td>
<td>Outline</td>
<td>Reframe</td>
<td>Recommend</td>
</tr>
<tr>
<td>Write</td>
<td>Summarize</td>
<td>Use</td>
<td>Separate</td>
<td>Synthesize</td>
<td>Support</td>
</tr>
<tr>
<td>Observe*</td>
<td>Model</td>
<td>Recognize Standards</td>
<td>Correct</td>
<td>Apply</td>
<td>Coach</td>
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<tr>
<td>Hear</td>
<td>Attempt</td>
<td>Check</td>
<td>Adapt</td>
<td>Build</td>
<td>Demonstrate</td>
</tr>
<tr>
<td>Identify</td>
<td>Copy</td>
<td>Detect</td>
<td>Adjust</td>
<td>Compose</td>
<td>Exhibit</td>
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<tr>
<td>Observe</td>
<td>Follow</td>
<td>Discriminate</td>
<td>Alter</td>
<td>Construct</td>
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<tr>
<td>See</td>
<td>Imitate</td>
<td>Differentiate</td>
<td>Change</td>
<td>Create</td>
<td>Instruct</td>
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<td>Smell</td>
<td>Model</td>
<td>Distinguish</td>
<td>Correct</td>
<td>Design</td>
<td>Teach</td>
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<td>Taste</td>
<td>Reenact</td>
<td>Notice</td>
<td>Customize</td>
<td>Originate</td>
<td></td>
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<td>Touch</td>
<td>Repeat</td>
<td>Perceive</td>
<td>Develop</td>
<td>Produce</td>
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<tr>
<td>Watch</td>
<td>Reproduce</td>
<td>Recognize</td>
<td>Improve</td>
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<td></td>
<td>Show</td>
<td>Select</td>
<td>Manipulate</td>
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<tr>
<td></td>
<td>Try</td>
<td></td>
<td>Modify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Usually no outcomes or objectives written at this level.
## Affective Domain Action Verbs

<table>
<thead>
<tr>
<th>Receiving</th>
<th>Responding</th>
<th>Valuing</th>
<th>Organization</th>
<th>Characterization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept</td>
<td>Behave</td>
<td>Accept</td>
<td>Adapt</td>
<td>Authenticate</td>
</tr>
<tr>
<td>Attend</td>
<td>Comply</td>
<td>Adapt</td>
<td>Adjust</td>
<td>Characterize</td>
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<td>Defend</td>
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<td>Display</td>
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<td>Differentiate</td>
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<td>Develop</td>
<td>Habituate</td>
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<td>Influence</td>
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<td>Manipulate</td>
<td>Produce</td>
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<td>Receive</td>
<td>Respond</td>
<td>Recognize</td>
<td>Modify</td>
<td>Represent</td>
</tr>
<tr>
<td>Recognize</td>
<td>Show</td>
<td>Seek</td>
<td>Practice</td>
<td>Validate</td>
</tr>
</tbody>
</table>

- **Receiving**: Accept, Attend, Describe, Explain, Locate, Observe, Realize, Receive, Recognize
- **Responding**: Behave, Comply, Cooperate, Discuss, Examine, Follow, Model, Present, Respond, Show
- **Valuing**: Accept, Adapt, Balance, Choose, Differentiate, Defend, Influence, Prefer, Recognize, Seek
- **Organization**: Adapt, Adjust, Alter, Change, Customize, Develop, Improve, Manipulate, Modify, Practice, Revise
- **Characterization**: Authenticate, Characterize, Defend, Display, Embody, Habituate, Internalize, Produce, Represent, Validate, Verify
Assessment of Outcomes

How do you know they got it?
“But assessing student learning is not new to faculty; we do this every semester as we evaluate student work. However, meeting the assessment expectations delineated in the new accreditation standards requires conventions beyond typical grading. The good news is that assessment practices can make student evaluation more meaningful, benefit your teaching, and improve student learning.”

--Fulks & Plutak
Paul Dressel (1983) has defined a grade as "an inadequate report of an inaccurate judgment by a biased and variable judge of the extent to which a student has attained an undefined level of mastery of an unknown proportion of an indefinite material."
Foundations of Outcomes Assessment

- Outcomes are meaningless until you define how you will assess them.

- Assessment is an integral part of curriculum design—not an afterthought. (Tomlinson)

- Utilize multiple assessment sources (Triangulation)
Full Circle

Closing the assessment loop

Must start with well-written, clearly articulated student learning outcomes
Closing the assessment loop

Student learning outcomes must drive assessment methods
Assessment Steps

- Select assessment method(s) that will accurately and appropriately measure the outcome.
- Establish your assessment criteria.
- Apply the assessment technique(s).
- Analyze the results of the assessment.
- Share results with students and provide feedback.
- Respond to the results and effect changes.
### Some Real Examples

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Link to Strategic Plan &amp; Core EEO’s</th>
<th>Action Steps</th>
<th>Assessment Criteria and Evaluation Methods</th>
<th>Assessment Results</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2301: Students will be able to identify and differentiate between historical and current theories in the field of psychology. (LO #1)</td>
<td>SBS 5.8</td>
<td>Students will be taught these concepts through lecture, class discussions, visual aids, and written assignments.</td>
<td><strong>METHOD:</strong> A representative number of classes will administer a pre-test to gauge student understanding of the concept before instruction. After instruction, students will be tested again. <strong>CRITERIA:</strong> Upon completion of the course, participating students will improve on their pre-tests scores by at least 25% on the post-test.</td>
<td>Criteria met. 30% of the students answered the question correctly on the pre-test. 68% of the students answered the question correctly on the post-test. The percent increase is 38%.</td>
<td>No modification necessary, but faculty decided to create new Learning Outcomes for Fall 2011.</td>
</tr>
</tbody>
</table>
### Some Real Examples

<table>
<thead>
<tr>
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<th>Assessment Results</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy 1301- Draw conclusions for the student’s own time/ culture from the ideas presented in the key thinkers that we study (LO #10)</td>
<td>2.1 SBS 7</td>
<td>Students will be taught these concepts through lecture, class discussions, visual aids, and written assignments.</td>
<td>METHOD: A representative number of classes will administer a pre-test to gauge student understanding of the concept before instruction. After instruction, students will be tested again. CRITERIA: Upon completion of the course, participating students will improve on their pre-tests scores by at least 25% on the post-test.</td>
<td>Criteria not met. 61% of the students answered the question correctly on the pre-test. 82% of the students answered the question correctly on the post-test. The percent increase is 21%.</td>
<td>The Philosophy instructors created a new rubric for testing students based upon a semester-end essay rather than a multiple choice test. This will be implemented in Spring 2011.</td>
</tr>
<tr>
<td>Student Learning Outcome</td>
<td>Link to Strategic Plan &amp; Core EEO’s</td>
<td>Action Steps</td>
<td>Assessment Criteria and Evaluation Methods</td>
<td>Assessment Results</td>
<td>Use of Results</td>
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<tr>
<td>Students in ENGL 1302 will be able to “write developed academic texts that support a controlling idea/thesis with appropriate evidence and research.”</td>
<td>2.1 C1</td>
<td>Students will be taught reading printed material, hearing lectures from instructor, practicing composition, receiving video instruction, working with online materials, and through other methods.</td>
<td>Method: Objective pre- and post tests will be given to students and will be graded by instructors. Criteria: Students’ scores on post test will rise by 20</td>
<td>Eighteen percent of students assessed raised their scores by 20% or more.</td>
<td>Faculty met 5-2-11 and decided to hold a workshop for instructors led by teachers whose scores rose by the highest percentages. Best practices for teaching this objective will be the topic for the workshop. The same learning outcome will be reassessed in fall 2011.</td>
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</table>
## Indirect and Direct Assessment

<table>
<thead>
<tr>
<th>Indirect Assessment</th>
<th>Direct Assessment</th>
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<tbody>
<tr>
<td>Assessment by gathering information from participants or stakeholders on their thoughts, attitudes, perceptions in relation to the program goals</td>
<td>Assessment by examining work produced by participants in the program to determine whether it meets the program goals</td>
</tr>
</tbody>
</table>
### Examples of Data Used for Indirect and Direct Assessment at the Course Level

<table>
<thead>
<tr>
<th>Indirect Assessment</th>
<th>Direct Assessment</th>
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</thead>
<tbody>
<tr>
<td>• Grades</td>
<td>• Pre-test/Post-test</td>
</tr>
<tr>
<td>• Course evaluation data</td>
<td>• Quizzes, exams, performances</td>
</tr>
<tr>
<td>• Supplemental course evaluation data</td>
<td>• Papers</td>
</tr>
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<td>• Informal conversations with students enrolled in the</td>
<td>• Oral presentations</td>
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<tr>
<td>course</td>
<td>• Research projects</td>
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<td>• Portfolios</td>
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<td>• Reflective journals</td>
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<td>• Open-response prompts</td>
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<tr>
<td>Benefits of Indirect and Direct Assessment</td>
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<td>------------------------------------------</td>
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<tr>
<td><strong>Indirect Assessment</strong></td>
<td><strong>Direct Assessment</strong></td>
</tr>
<tr>
<td>• Can be inexpensive and quick</td>
<td>• Clearly connects student work, program goals and the assessment process</td>
</tr>
<tr>
<td>• Allows gathering of large samples of data</td>
<td>• Assesses actual learning not perceptions/beliefs about learning</td>
</tr>
<tr>
<td>• Often is standardized and easily compared</td>
<td>• Often makes use of pre-existing sources of data</td>
</tr>
<tr>
<td>• Usually easy to summarize</td>
<td>• Facilitates the rethinking of course and curricular structures because we can view student work more comprehensively</td>
</tr>
</tbody>
</table>
Forms of Direct Assessment

- Rubrics – eliminates ambiguity regarding criteria to meet learning goals, expectations of performance and how evaluation will occur

- [http://rubistar.4teachers.org/](http://rubistar.4teachers.org/)
Forms of Assessment

- Quizzes/exams – snapshots in time of recall ability and memory; Pre-Test/Post-Test
- Portfolios – longitudinal record of work and progress over time
- Performance demonstrations
- Essays – ability to communicate in writing, analyze and solve problems, integrate ideas and information
SO...
To summarize:

- Why identifying and measuring student learning outcomes matters.
- Allows us to showcase quality teaching and learning.
- Helps us improve student learning.
- Creates a better teaching environment.
- Provides meaningful feedback to faculty.
- Facilitates collaboration among faculty.
- Keeps us in compliance with SACSCOC, THECB.
- Students know what is expected of them and can take ownership for their learning.
To summarize:

A student learning outcomes is a particular level of knowledge, skills and abilities that a student has attained at the end (or as a result) of his/her engagement in a particular set of collegiate experiences.”
To summarize

- The essential elements of a student learning outcome:
  - Specific
  - Measurable
  - Acceptable
  - Realistic
  - Targeted
To summarize:

- Three categories for assessment:
  - Cognitive
  - Psychomotor
  - Affective
To summarize:

- Good assessment practices:
  - Select assessment method(s) that will accurately and appropriately measure the outcome.
  - Establish your assessment criteria.
  - Apply the assessment technique(s).
  - Analyze the results of the assessment.
  - Share results with students and provide feedback.
  - Respond to the results and effect changes.
To summarize:

- Identify various assessment methods:
  - In-direct
  - Direct
    - Quizzes/exams
    - Portfolios
    - Performance demonstrations
    - Essays
References

- Gorman, Dr. Tanya (2008), *Assessing Student Learning Outcomes*, Presentation at the SACS Commission on Colleges Summer Institute 2008
- San Mateo Community College
- St. Lawrence University
Thank You!

Dr. Lee Ann Nutt
Vice President of Instruction – Tomball
281-351-3378
LeeAnn.Nutt@lonestar.edu

http://lonestar.edu/tomball-vpi.htm