Workshop 1
Common Language & Approaches to Student Learning Outcomes

Patricia Marsh and Ma. Concepcion Manzo
(pmarsh@k-state.edu and mcdmanzo@k-state.edu)
Assessment & Program Review
Kansas State University
April 15, 2004

Main Source: Susan Hatfield, *Departmental Assessment Plans*, Academic Chairs Conference, February 2004, Orlando, Florida; Shatfield@winona.edu
The Workshop Series

- Understanding Assessment
- Departmental Assessment Plans, Nuts and Bolts:
  - Common Language & Approaches to Student Learning Outcomes
  - Developing an Outline for Assessing Student Learning Outcomes
  - Identifying the Tools for Assessing Student Learning Outcomes
  - Developing a Plan for the Assessment of Student Learning in a Degree Program
Workshop 1

• Understanding Assessment
  • Definition and background
  • Evolution and shifts
  • Principles of Good Practice for Assessing Student Learning

• Common Language & Approaches to Student Learning Outcomes
  • Language of Assessment/ Terminology
  • Constructing and Revising Student Learning Outcomes
Assessment is:

✓ an ongoing process,
✓ aimed at understanding and improving student learning.

It involves:

✓ making our expectations explicit and public,
✓ setting appropriate criteria and high standards for learning quality,
✓ systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards,
✓ using the resulting information to document, explain, and improve performance.
Assessment

When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions and create a shared academic culture dedicated to assuring and improving the quality of higher education.

In 2002, K-State was reaccredited by NCA for another 10 years, however, two main areas that need improvement were identified:

- (1) Assessment of student learning, and
- (2) Diversity education

Thus, the institution was granted reaccreditation with the condition that an Assessment Focused Visit will be conducted in spring 2005.
Highlights from NCA’s Observations of Assessment K-State, October 2001

Evidence that requires institutional attention and Commission follow up:

- “There is not presently a coherent, widespread understanding that the purpose of assessment is the continuous improvement of student learning ….”

- “Faculty ownership of assessment in academic programs has not developed consistently across campus, and assessment in graduate education has not begun.

- “Students have not participated in the development or implementation of the University’s assessment program.”

Evidence that requires institutional attention and Commission follow up (continued):

- “The K-State assessment program is in its infancy; the supporting infrastructure has not been fully developed. … to develop the structures needed for
  a) educating the University community about assessment,
  b) providing administrative leadership that will lead to embedding the assessment process in the institutional culture, and
  c) ensuring the sustainability of the assessment program.”

Source: NCA’s Final Report for K-State, 2001, Section 2, p. 11
NCA’s Expectations for the 2005 Focused Visit

“The Team recommends a focused visit to evaluate whether the institutions is making progress in implementing a program to assess student learning outcomes. **By the time of the focused visit in 2005, there should be evidence that K-State is moving toward maturing levels of continuous improvement and that faculty, students, and administrators across the University are involved in the assessment process.**” [Bold was added to the original quote.]

Source: *NCA’s Final Report for K-State, 2001, Section 2, p. 14*
In other words, NCA and other constituents are looking for:

Evidence of broad participation by faculty and students in the development of Assessment Student Learning (ASL) programs.

Evidence that we are clear about expectations for learning outcomes and that we are communicating that to students.

Evidence that students (as a group) are learning from those learning opportunities.

Evidence that we are using the results of our ASL activities to improve student learning.
Understanding Assessment

- Assessment initiatives evolve

Hatfield, 2004
Maturing Assessment

BEGINNING

PROGRESS

MATURING

INSTITUTIONAL RESPONSIBILITY

DEPARTMENT RESPONSIBILITY

Hatfield, 2004
Maturing Assessment

BEGINNING

PROCESS MEASURES

PROGRESS

OUTCOME MEASURES

MATURING

Hatfield, 2004
Maturing Assessment

BEGINNING

PROGRESS

MATURING

INDIRECT MEASURES

DIRECT MEASURES

Hatfield, 2004
Maturing Assessment

Levels of Implementation

I. Institutional Culture
   a) Collective/ Shared Values
   b) Mission

II. Shared Responsibility
   a) Faculty
   b) Administration and Board
   c) Students

III. Institutional Support
   a) Resources
   b) Structures

IV. Efficacy of Assessment

Source: Assessment of Student Academic Achievement: Levels of Implementation, Addendum to the Handbook of Accreditation, Second Edition; http://www.ncacihe.org/resources/assessment/
I. Institutional Culture: a) Collective/Shared Values

Maturing Assessment

BEGINNING

PROGRESS

MATURING

Little shared understanding, development of assessment

Assessment is a way of life

HLC, NCA
I. Institutional Culture:  b) Mission

Maturing Assessment

BEGINNING

Student learning not clearly stated as a goal
Department purposes not linked to institution mission and goals

PROGRESS

High value placed on student learning
Clear linkage of academic program’s goals & assessment outcomes/activities with institution’s mission

MATURING

HLC, NCA
II. Shared Responsibility: a) Faculty

Maturing Assessment

**BEGINNING**

- Teacher evaluation & grades as measures of student learning
- Faculty and staff questioning efficacy of assessment program

**PROGRESS**

- Measurable outcomes
- Direct & Indirect Measures aligned with outcomes
- Faculty knowledgeable about components of Assessment Program

**MATURING**

HLC, NCA
II. Shared Responsibility: b) Administration & Board

Maturing Assessment

BEGINNING

Concerns in Evaluation
Team’s report
or Assessment Panel
Review not adequately
addressed

PROGRESS

Leadership understands
value of assessment
Provides support on
recommended improvements
resulting from assessment
Devises strategies to sustain
assessment activities

MATURING

HLC, NCA
II. Shared Responsibility: c) Students

Maturing Assessment

BEGINNING

Students know little about the Assessment Program:
- How it will be carried out
- Their role in its success
- How it can be useful to them
- Future cohorts with students

PROGRESS

Students serve on Institution or department/Program Committees

MATURING

Student leaders educate peers about the Assessment Program

HLC, NCA
III. Institutional Support: a) Resources

Maturing Assessment

BEGINNING

Few resources allocated to operate and sustain a comprehensive assessment program

Little provision for collecting, interpreting & using data above individual classroom level

PROGRESS

Ensure that sufficient resources are available to sustain viable Assessment Program, both at department and Institution levels

MATURING

HLC, NCA
III. Institutional Support: b) Structures

Maturing Assessment

BEGINNING

Students know little about the Assessment Program:
- How it will be carried out
- Their role in its success
- How it can be useful to them
- Future cohorts with students

PROGRESS

Institution and departmental assessment programs regularly reviewed & updated; effectiveness of changes made to improve student learning evaluated

MATURERING

HLC, NCA
IV. Efficacy of Assessment

Maturing Assessment

BEGINNING

- Few units use assessment results
- Confusion regarding different purposes & relationships among: faculty evaluation, assessment of student learning, program review, and institutional effectiveness

PROGRESS

- Units are collecting, interpreting, and using assessments results in all degree programs

MATURING

HLC, NCA
Principles of Good Practice for Assessing Student Learning

- Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.
- Assessment requires attention to outcomes, but also and equally to the experiences that lead to those outcomes.
- Assessment works best when it is ongoing, not episodic.

Common Reactions to Assessment Initiatives

- Ignoring it
- Bribing someone else to do it
- Complaining about it
- Losing sleep over it
- Sitting down and writing it

Hatfield, 2004
Big Mistakes in Assessment

- Assuming that it will go away
- Trying to do too much, too soon
- Expecting to get it right the first time
- Not considering implementation issues when creating plans

Hatfield, 2004
Big Mistakes in Assessment

- Borrowing plans and methods without acculturation
- Demanding statistical research standards
- Doing it for accreditation instead of improvement

Hatfield, 2004
Big Mistakes in Assessment

- Confusing institutional effectiveness with student learning
- Making assessment the responsibility of one individual
- Assuming collecting data is Doing Assessment

Hatfield, 2004
Student Learning Outcomes
Student Learning Outcomes

The knowledge, skills/abilities, and attributes we want our students to be able to demonstrate.

– From their learning experiences both curricular and co-curricular activities.
Characteristics of Student Learning Outcomes

They are:

- Learner Centered
- Specific
- Action oriented
- Cognitively Appropriate

Hatfield, 2004
Student Learning Outcomes

Basic Format:

• Students will be able to **<<action verb>> <<something>>**

Example:

• Students will be able to apply research methodologies to examine issues within the discipline.

Hatfield, 2004
<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>APPLICATION</th>
<th>ANALYSIS</th>
<th>SYNTHESIS</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cite</td>
<td>Associate</td>
<td>Analyze</td>
<td>Arrange</td>
<td>Appraise</td>
</tr>
<tr>
<td>Count</td>
<td>Classify</td>
<td>Appraise</td>
<td>Assemble</td>
<td>Assess</td>
</tr>
<tr>
<td>Define</td>
<td>Compare</td>
<td>Calculate</td>
<td>Collect</td>
<td>Choose</td>
</tr>
<tr>
<td>Draw</td>
<td>Compute</td>
<td>Classify</td>
<td>Compose</td>
<td>Compare</td>
</tr>
<tr>
<td>Identify</td>
<td>Contrast</td>
<td>Compare</td>
<td>Construct</td>
<td>Criticize</td>
</tr>
<tr>
<td>List</td>
<td>Differentiate</td>
<td>Debate</td>
<td>Create</td>
<td>Determine</td>
</tr>
<tr>
<td>Name</td>
<td>Discuss</td>
<td>Diagram</td>
<td>Design</td>
<td>Estimate</td>
</tr>
<tr>
<td>Point</td>
<td>Distinguish</td>
<td>Differentiate</td>
<td>Design</td>
<td>Evaluate</td>
</tr>
<tr>
<td>Quote</td>
<td>Estimate</td>
<td>Distinguish</td>
<td>Integrate</td>
<td>Grade</td>
</tr>
<tr>
<td>Read</td>
<td>Explain</td>
<td>Examine</td>
<td>Manage</td>
<td>Judge</td>
</tr>
<tr>
<td>Recite</td>
<td>Express</td>
<td>Illustrate</td>
<td>Organize</td>
<td>Measure</td>
</tr>
<tr>
<td>Record</td>
<td>Extrapolate</td>
<td>Interpret</td>
<td>Plan</td>
<td>Rank</td>
</tr>
<tr>
<td>Repeat</td>
<td>Interpolate</td>
<td>Locate</td>
<td>Prepare</td>
<td>Rate</td>
</tr>
<tr>
<td>Select</td>
<td>Locate</td>
<td>Locate</td>
<td>Prescribe</td>
<td>Recommend</td>
</tr>
<tr>
<td>State</td>
<td>Predict</td>
<td>Order</td>
<td>Produce</td>
<td>Revise</td>
</tr>
<tr>
<td>Tabulate</td>
<td>Operate</td>
<td>Practice</td>
<td>Propose</td>
<td>Score</td>
</tr>
<tr>
<td>Tell</td>
<td>Restructure</td>
<td>Report</td>
<td>Specify</td>
<td>Select</td>
</tr>
<tr>
<td>Trace</td>
<td>Restructure</td>
<td>Restructure</td>
<td>Synthesize</td>
<td>Standardize</td>
</tr>
<tr>
<td>Underline</td>
<td>Sketch</td>
<td>Schedule</td>
<td>Write</td>
<td>Test</td>
</tr>
<tr>
<td>Translate</td>
<td>Solve</td>
<td>Sketch</td>
<td>Write</td>
<td>Validate</td>
</tr>
</tbody>
</table>

Hatfield, 2004 (adapted from Bloom's Taxonomy)
Hands-on Exercise #1

In small groups, draft 1-2 student learning outcomes for students graduating in your discipline.

*Example* (psychology):

» Students will be able to apply psychological principles to personal, social, and organizational issues.
Worksheet for Exercise #1

Students will . . .
Student Learning Outcomes

- How to revise student learning outcomes into a simpler and easier to use format.

- The proposed format will help in the selection of applicable assessment tools, measures, assignments, performances, etc.
Example #1

Gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected

**BETTER:** Students will be able to apply factual information to a problem.

**COMPONENTS:**
- Relevance
- Clarity
- Comprehensiveness
- Aware of Bias

Hatfield, 2004
**Hands-on Exercise #2**

*Students will be able to:*

Imagine and seek out a variety of possible goals, assumptions, interpretations, or perspectives which can give alternative meanings or solutions to given situations or problems.

Hatfield, 2004
Worksheet for Exercise #2

Better (rephrasing):

Key Components:
Possible Answer

**BETTER:** Students will be able to provide alternative solutions to situations or problems.

**COMPONENTS:**

- Assumptions
- Perspectives
- Interpretations
- Analysis of comparative advantage

Hatfield, 2004
Example #3

Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines (one of these experimental components should develop, in greater depth, students’ laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty)

**BETTER:** Students will be able to test hypotheses.

**COMPONENTS**
- Data collection
- Statistical Analysis
- Graphical Analysis
- Identification of sources of error

Hatfield, 2004
Lessons Learned/
Learning Outcome Rules

» Use **one** cognitive level
» Focus on outcomes, not processes (focus on **what**, not on **how**)
» List **single** accomplishments
» Do not indicate level of quality (effective)

Hatfield, 2004
Accreditation reviewers praise institutions’ assessment programs that “have clearly linked their assessment activities to their own statements of purpose and goals, and to their objectives for student learning, and in which all of these are reflective of relevant portions of the Institution’s Mission and Goals statement and its published educational purposes.” (Lopez, 1996.)
Hands-on Exercise #3

Refer to the learning outcomes developed for students in your degree program(s).

Select one learning outcome and determine if you can improve it into a simpler and easier to use format.
**Identify the Assessment Points in the Curriculum**

- Where do you want to target your assessment efforts?

Hatfield, 2004
We can identify where in the curriculum the student learning outcomes are developed.

Hatfield, 2004
We can identify where in the curriculum the student learning outcomes are introduced, emphasized or reinforced.

Hatfield, 2004
Writing (student learning outcome)

*Mechanics
*Style
*Voice
*Structure

Hatfield, 2004
Questions?