New Faculty/Staff Assessment Workshop

Completing an Assessment Plan:
Utilizing Available Tools & Resources

Kansas State University

October 24, 2008

Conducted by: Office of Assessment
226 Anderson Hall

Briana Goff (bnelson@k-state.edu or 532-5712)
Steven Hawks (sjhawks2@k-state.edu or 532-5712)

Workshop Outline

- Big picture for assessment
- Introduction to assessment
- Student Learning Outcomes
- Assessment at K-State
- Key due dates
- Question and Answer session

Learning Outcomes for the Assessment Workshop

- Participants will be able to:
  - Know what assessment is, and how to assess;
  - How to write clear student learning outcomes for your discipline;
  - Understand how assessment of student learning addresses the needs of multiple constituents (e.g., the state of Kansas and accreditation agencies);
  - Know the types of information being requested in the assessment plans;
  - Find assessment resources on the Assessment web site;
  - Know when assessment plans are due and how they will receive feedback;
  - Ask questions to clarify how assessment of student learning can be applied to your degree program(s).

Assessment Pop Quiz

- Please take 10 minutes to complete the Assessment Pop Quiz

What is Assessment?

- "Assessment is any effort to gather, analyze, and interpret evidence which describes institutional, divisional, or agency effectiveness."
- Effectiveness includes:
  - Student learning outcomes
  - Clientele satisfaction
  - Compliance with professional standards
  - Comparisons with other institutions
- Assessment guides good practice

Jennifer R. Keup

What is Assessment?

- **Assessment** is a means for focusing our collective attention, examining our assumptions, and creating a shared culture dedicated to continuously improving the quality of higher learning.

  -Thomas A. Angelo

Assessment

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.

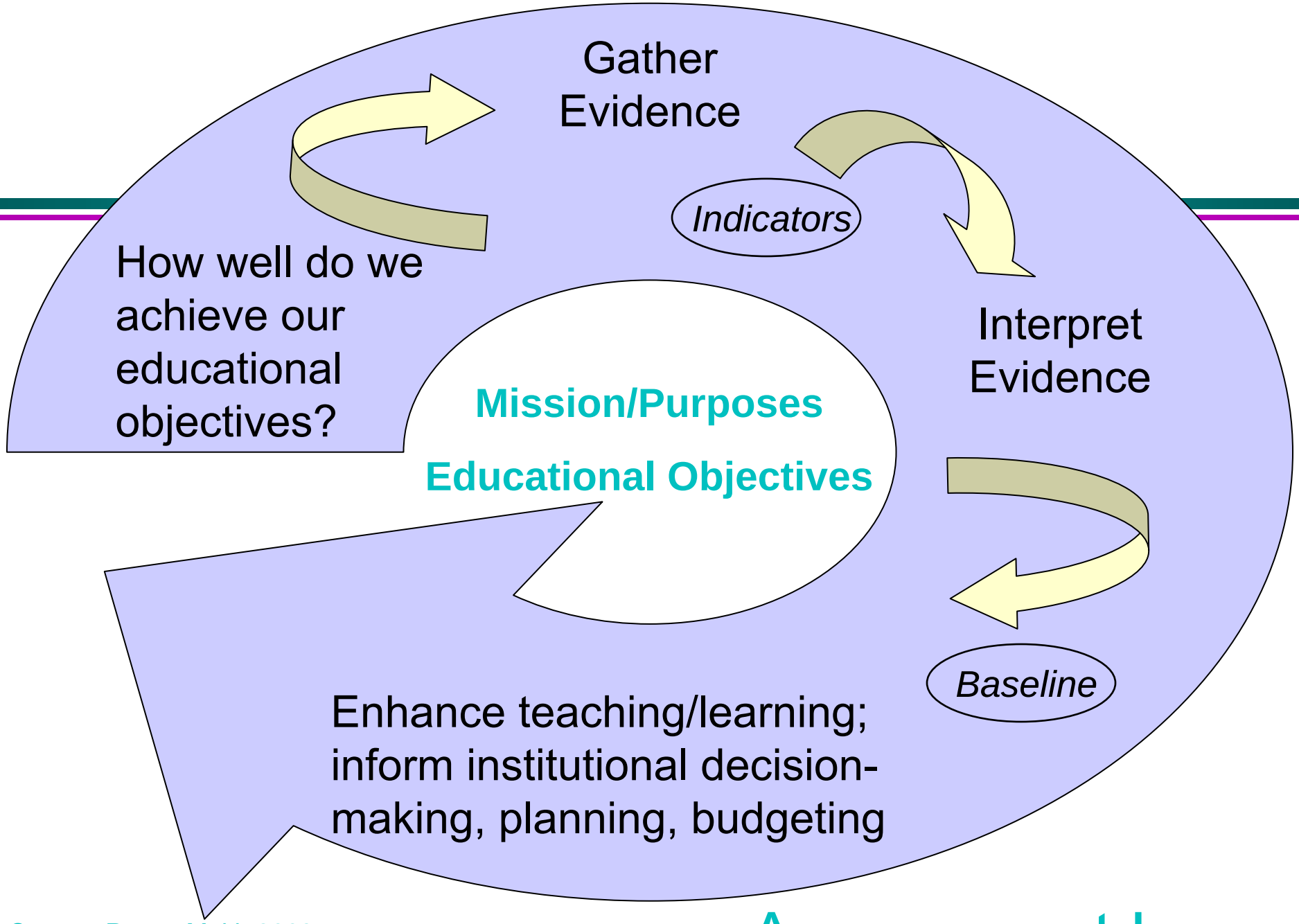
Thomas A. Angelo, AAHE Bulletin, November 1995, p.7

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.

Please refer to handout.

Source: *9 Principles of Good Practice for Assessing Student Learning*. American Association of Higher Education (AAHE) Assessment Forum, 1992 in Mary Huba & Jann Freed, (2000). *Learner-centered assessment on college campuses*. Boston, MA: Allyn and Bacon.



Source: Peggy Maki, *2002 AAHE Assessment Forum*; NCA Higher Education Learning Commission

Assessment Loop

What measure?

DIRECT

- **Evidence is based on student performance, which demonstrates learning itself.**
- **Example: Evaluation of students' research paper in terms of proper use of evidence to support viewpoint expressed.**

INDIRECT

- **Evidence is a reflection about the learning or secondary evidence of its existence.**
- **Example:Survey about whether a course or program helped develop a greater sensitivity to issues of diversity.**
- **May enrich or illuminate findings on student achievement derived from using direct measures.**
- **Inadequate when used alone**

Sources: Andrea Leskes, *Assessment Glossary*, AACU, Peer Review, Winter/ Spring 2002, http://www.aacu.org/peerreview/pr-sp02/pr-sp02reality.cfm

Cecilia Lopez, *Opportunities for Improvement*, HLC, NCA, 1997, http://www.ncacihe.org/resources/assessment/97ASSESS.pdf

Indirect Assessment Methods

- Examples
  - Satisfaction measures
  - Program evaluations
  - Self-ratings of skills
  - Self-assessment of change
  - Agreement with statements
  - Inventories
  - Informal peer-to-peer conversations
  - Grades*
- Pro/Con of indirect assessment methods

Direct Assessment Methods

- Examples
  - Portfolios
  - Capstones
  - Performances
  - Common assignments
  - Exams
  - Observations of behavior/performance
  - Standardized tests
  - Work samples
- Pro/Cons of direct assessment methods
- Making indirect methods direct

Hands on Exercise #1

- Write a Rubric!
- Please take 10 - 15 minutes within your groups to create a rubric to evaluate students' cookies.

When and for What End?

FORMATIVE

- **Assessments are conducted throughout the course or program (e.g., trends, progress at midpoint).**
- **Example: Evaluating the first lab report in order to provide feedback for improvement. Also serves as a gage of early performance (e.g., pre-test)**

SUMMATIVE

- **Assessment measures are used at the conclusion of a course or program, to reflect the sum total or a final product that measures achievement or performance.**
- **Example: Comprehensive or final exam to critically evaluate complex issues** (*assumes student is given the opportunity to practice analysis across the program/ course*).

Sources: Andrea Leskes, *Assessment Glossary*, AACU, Peer Review, Winter/ Spring 2002, http://www.aacu.org/peerreview/pr-sp02/pr-sp02reality.cfm
James Madison University (JMU) *Dictionary of Student Outcome Assessment*, http://people.jmu.edu/yangsx/index.htm
Greater Expectations: A New Vision for Learning as a Nation Goes to College, AACU, 2002; http://www.aacu.org/gex/index.cfm

Against What?

STANDARDS-based

- **A set level of accomplishment by students.**
- **Example: Having a conversation about daily activities in a foreign language evaluated for proper use of grammar. Students mastery is assessed.**

VALUE ADDED

- **Measures are used to assess the increase in learning that occurs during a course, program, or undergraduate education**
- **Requires a baseline or pre-test measurement for comparison.**
- **Example: Whether senior papers demonstrate more sophisticated writing skills (in the aggregate) than freshmen papers.**

Greater Expectations (2002), Leskes (2002), Lopez (1997), Peer Review (2002)

By Whom?

INTERNAL/ LOCAL

- **Measures are developed and/or assessment made by institution's faculty based on their teaching approaches, student capabilities and learning outcomes.**

EXTERNAL

- **Measures are developed and or assessment made by an individual or organization external to the institution**
- **Example: Standardized tests**
  - Major Field Achievement Test (MFAT),
  - ACT's Collegiate Assessment of Academic Proficiency (CAAP),
  - ETS' Academic Profile,
  - Graduate Record Exam (GRE), Graduate Management Aptitude Test (GMAT)

Lopez (1997), Leskes (2002), *Greater Expectations* (2002)

Where?

COURSE-EMBEDDED

- **Collecting assessment data on assignments, tests or work of students as a normal part of their course work**
- **Examples: Course-related work or projects, comprehensive exams, recitals, internships, instruments including questions in a course test**

CO-CURRICULAR

- **Assessment conducted in out-of-class activities**
- **Example: Assessing performance in group decision-making and problem solving while working to build an architectural model for a planned retirement community.**

Lopez (1997), Leskes (2002), *JMU Dictionary of Student Outcomes Assessment*, Palomba, C.A. & Banta, T,W, (1999), *Assessment Essentials*, *Greater Expectations* (2002)

On Whom?

INDIVIDUAL

- **Measures are applied to individual students or a sample of students.**
- **Example: Portfolio assessment**

COLLABORATIVE

- **Measures are applied to or observed on a group of students working together.**
- **Example: Assessing communication or teamwork skills among people in research teams working on a research project; group projects.**

Lopez (1997)

Meaning?

QUANTITATIVE

- **Measures that yield data which can be analyzed using objective methods.**
- **Generalizations based on analysis of numerical data.**
- **Example: Essay questions blind scored by faculty; use of rubrics.**

QUALITATIVE

- **Measures that yield data that are subjective or quasi-objective.**
- **Can support findings from quantitative analysis.**
- **Example: "Themes" that emerge from students' final essays, term paper, or lab reports.**

Lopez (1997)

Writing Outcome Statements:

- Be SMART:
  - **S**pecific
  - **M**easurable
  - **A**ggressive but **A**ttainable
  - **R**esults-oriented
  - **T**ime-bound

A Systematic Approach to Assessment

Seek first to understand, then to be understood

- Use the ABCD planning model (UNC/Greensboro) for your student learning outcomes
  - ✓ **Audience** – who will be learning?
  - ✓ **Behavior** – what behavior should the learner be able to do?
  - ✓ **Condition** – under what conditions do you want the learner to be able to do it?
  - ✓ **Degree** – how well must it be done?

The 7 Habits of Highly Effective People and *The 8th Habit.* Covey, Stephen R. New York: Free Press (A Division of Simon & Shuster. 2004

The ABCD information is from a presentation by Stephen C. Zerwas and Sarah Carrigan at the University of North Carolina Greensboro and adapted by Deborah Vaughn at College of Charleston.

Student Learning Outcomes

- Student Learning Outcomes are the:
  - **knowledge**,
  - **skills / abilities**, and
  - **attributes / dispositions**

  we want our students to be able to demonstrate.

- Learning outcomes are usually derived from students' academic and co-curricular activities.

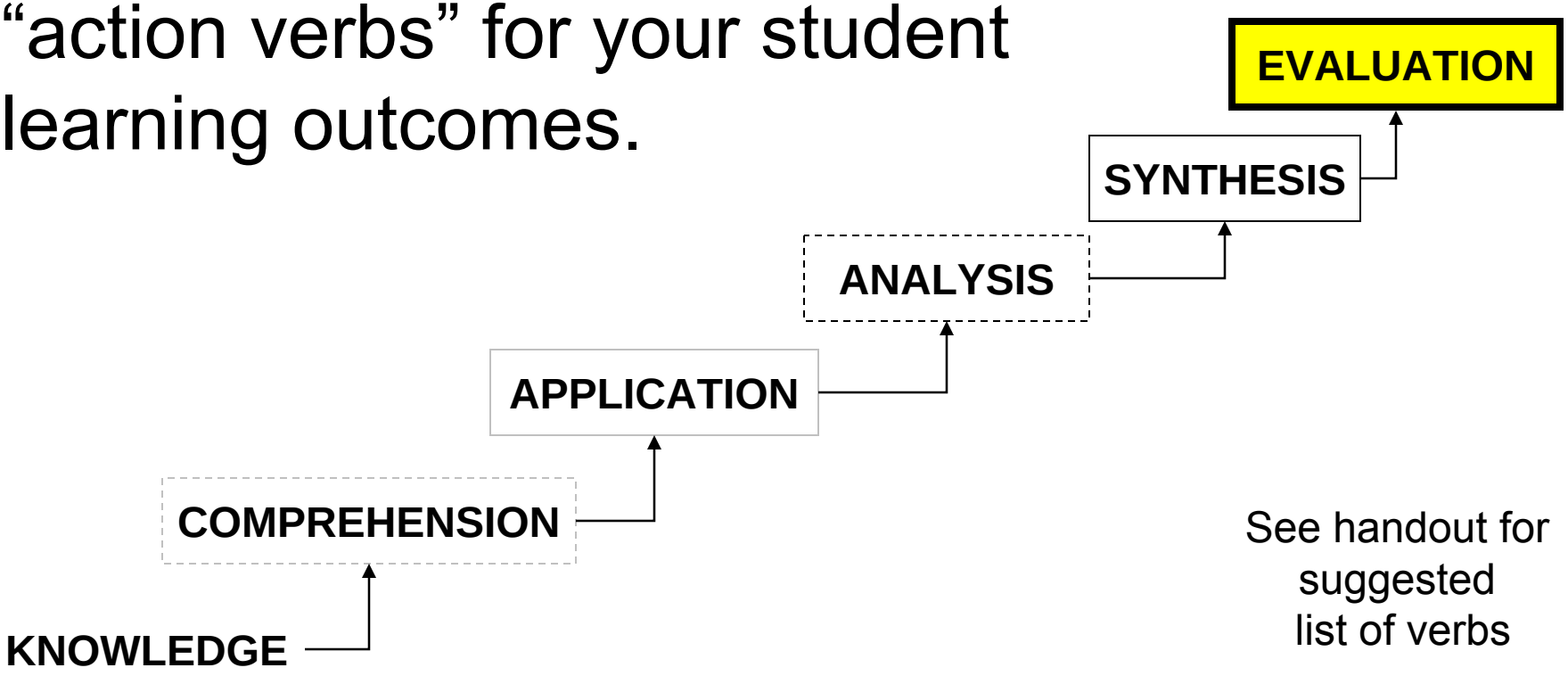
Characteristics of Student Learning Outcomes

They are:

- Learner Centered
- Specific
- Action oriented
- Cognitively Appropriate

Hatfield, 2004

- Bloom's taxonomy is a useful guide when deciding on the "action verbs" for your student learning outcomes.



See handout for suggested list of verbs

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

KNOWLEDGE

Cite
Count
Define
Draw
Identify
List
Name
Point
Quote
Read
Recite
Record
Repeat
Select
State
Tabulate
Tell
Trace
Underline

COMPREHENSION

Associate
Classify
Compare
Compute
Contrast
Differentiate
Discuss
Distinguish
Estimate
Explain
Express
Extrapolate
Interpolate
Locate
Predict
Report
Restate
Review
Tell
Translate

APPLICATION

Apply
Calculate
Classify
Demonstrate
Determine
Dramatize
Employ
Examine
Illustrate
Interpret
Locate
Operate
Order
Practice
Report
Restructure
Schedule
Sketch
Solve
Translate
Use
Write

ANALYSIS

Analyze
Appraise
Calculate
Categorize
Classify
Compare
Debate
Diagram
Differentiate
Distinguish
Examine
Experiment
Identify
Inspect
Inventory
Question
Separate
Summarize
Test

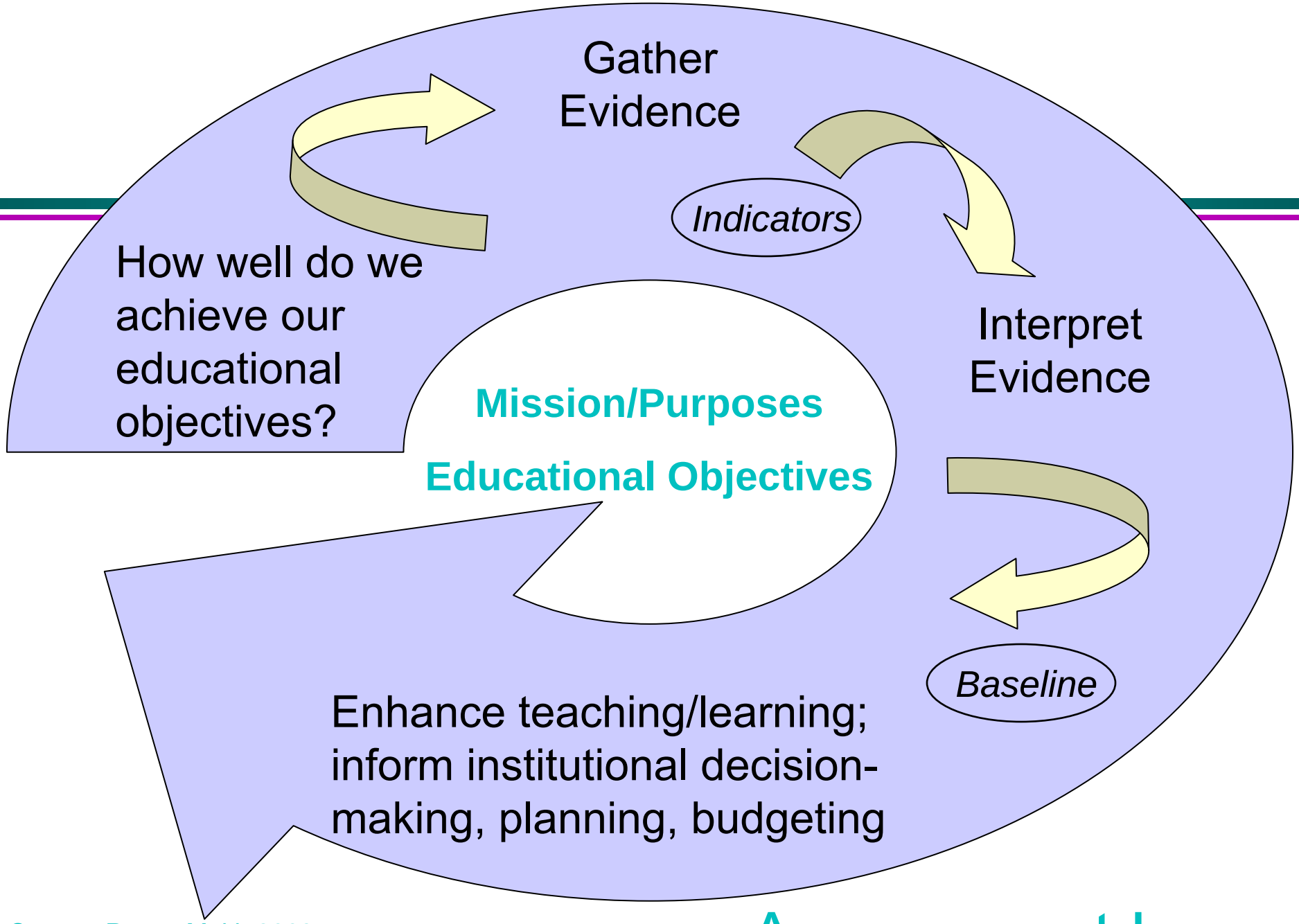
SYNTHESIS

Arrange
Assemble
Collect
Compose
Construct
Create
Design
Formulate
Integrate
Manage
Organize
Plan
Prepare
Prescribe
Produce
Propose
Specify
Synthesize
Write

EVALUATION

Appraise
Assess
Choose
Compare
Criticize
Determine
Estimate
Evaluate
Grade
Judge
Measure
Rank
Rate
Recommend
Revise
Score
Select
Standardize
Test
Validate

Hatfield, 2004 (adapted from Bloom's Taxonomy)



Source: Peggy Maki, *2002 AAHE Assessment Forum*; NCA Higher Education Learning Commission

Assessment Loop

Hands-on Exercise #2

- 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.

K-State Student Learning Outcomes

- Undergraduate
  - Knowledge
  - Critical Thinking
  - Communication
  - Diversity
  - Academic & Professional Integrity
- Graduate
  - Knowledge
  - Skills
  - Attitudes & Professional Conduct

Please refer to handout

Hands-on Exercise #3

- Interpreting Results and Closing the Loop

- Please take 10 minutes to complete this worksheet within your groups.

The Big Picture

K-State's Assessment Program

- Student Learning Outcomes:
  - Course, **PROGRAM**, unit, college and/or **UNIVERSITY** levels
- Assessment Plans
- Assessment Reports
  - Annual
  - Cyclical and detailed

See relational chart at:
http://www.k-state.edu/assessment/process/bigpicture.pdf

Template for Assessment Plans:

1. **Student Learning Outcomes (SLOs)**
   - How to choose:
     - What is doable for your area?
     - What outside factors must be taken into consideration?
       - E.g., feedback from advisory council, accreditation agency, partnerships with other departments or universities.
     - Which SLOs have the highest importance at this moment?
     - Which SLOs are your faculty most interested in pursuing?

Additional resources on how to write SLOs are available on the Assessment web site (http://www.kstate.edu/assessment/slo/index.htm)

Template for Assessment Plans:

2. Student Learning Outcomes (SLOs)

- Special rationale for selection of SLOs *(optional)*

- Relationship of selected SLOs with university-wide student learning outcomes.
  - Undergraduate and Graduate SLOs
  - Purposes for matching program & university-wide SLOs:
    - Kansas Board of Regents' new and growing request for assessment data from its institutions.
    - Providing more comprehensive explanations and descriptions of university-wide assessment to Accreditors.

Template for Assessment Plans:

3. How will the learning outcomes be assessed? What groups will be included in the assessment?
   - Assessment Tools & Methods
     - Identifying DIRECT vs. INDIRECT measures
   - Who will be assessed?
     - All students, alumni, employees, etc.
     - Will sampling be used?

Ways of thinking about assessment measures (i.e., aggregating data)

- Across multiple assignments and activities (same instructor).
- Across multiple instructors for the same course.
- Across multiple instructors over multiple courses (e.g., all 200 level courses).
- Using the same assignment or activity across multiple course sections, courses, instructors.

Common Methodological Problems

- **The description of methods fails to specify how and when the data will be collected, interpreted, and utilized, by whom, and for what end;**
- **Inappropriate sampling;**
- **Lack of a baseline (or point of comparison) against which to assess growth and development in the programs (e.g., measuring student learning at different points in time or across different cohorts of students);**

Source: Cecilia Lopez, *Opportunities for Improvement, Advice form Consultant-Evaluators on Programs to Assess Student Learning,* Commission on Institutions of Higher Learning, NCA, March 1996, reprinted April 1997. http://www.ncacihe.org/resources/assessment/97ASSESS.pdf

Common Methodological Problems

- **Failure to determine if measures are reliable;**
- **Failure to determine the adequacy of measurement procedures;**
- **Systematic bias due to reliance on only one measure;**
- **A lack of system to assure that instruments have content validity (i.e., measure accurately what they are designed to measure);**

Lopez (1997)

- Learning about different types of assessment data
  - » Questions to consider when selecting measures to assess student learning outcomes.

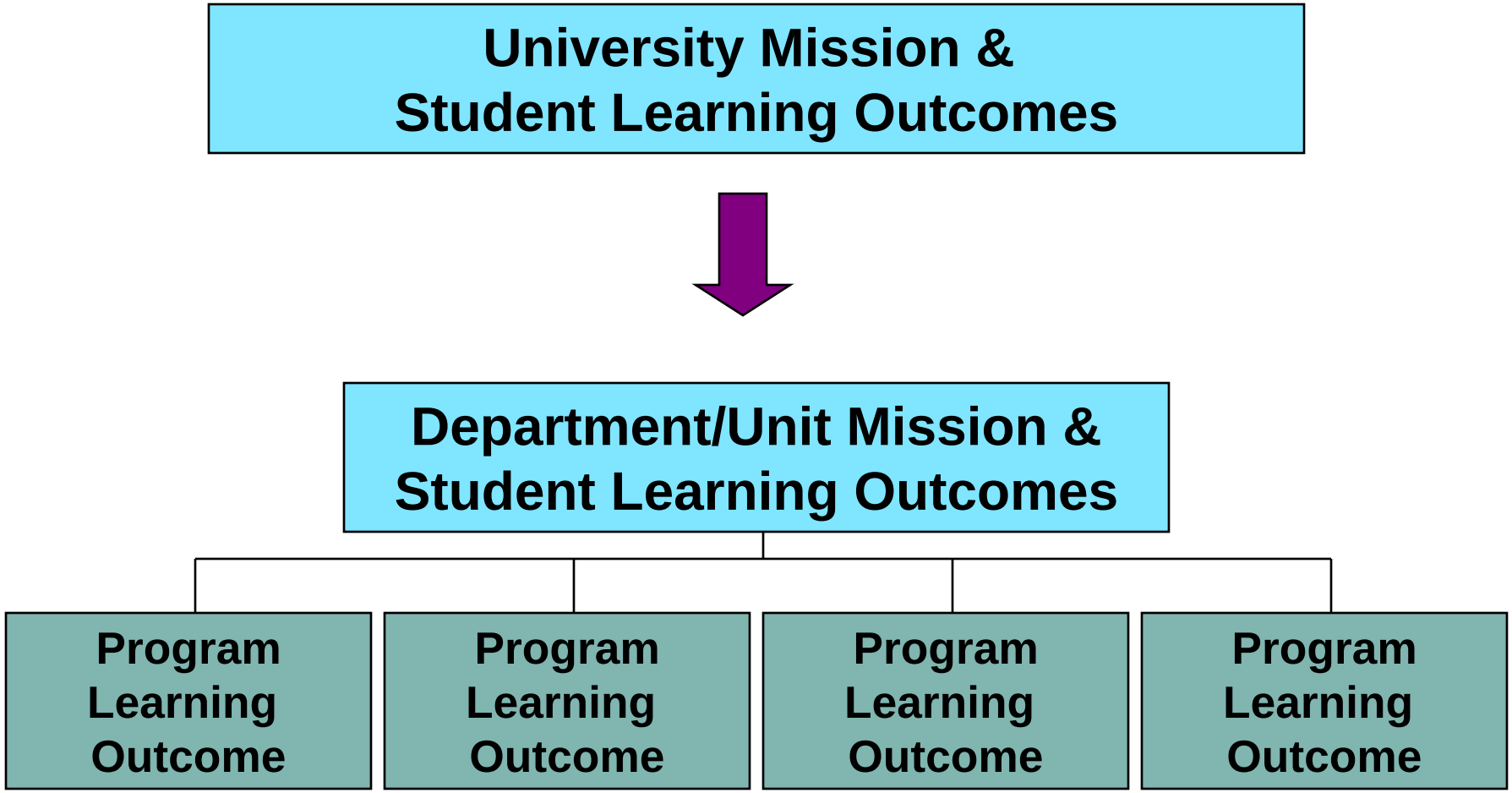
- *For the following slides, please refer to the handouts for definitions and examples.*

Developing Measures and Targets

- Think MATURE:
  - **M**atches: directly related to the outcome it is trying to measure
  - **A**ppropriate methods: uses appropriate direct and indirect measures
  - **T**argets: indicates desired level of performance
  - **U**seful: measures help identify what to improve
  - **R**eliable: Based on tested, known methods
  - **E**ffective and **E**fficient: characterize the outcome concisely

Developing an Assessment Plan

4. **Identify and Connect Degree Program Student Learning Outcomes with at least one of the following:**
   - University Mission Statement and Learning Outcomes
   - Department-wide Mission and/or Outcomes
   - Standards, Criteria or Learning Outcomes Identified by Accrediting Agencies
   - Recommendations from professional organizations/industry



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.)

Developing an Assessment Plan

5. Identify the components of successful achievement of the outcome and refine your learning outcomes.

- Where's the bar?
- What are we looking for in students' performance?
- What types of knowledge, skills, attributes are we looking for?

Adapted from Hatfield, 2004

Key Due Dates

- March 2, 2009
  - APRs on Assessment of Student Learning for the 2007-2008 academic year are submitted by departments to their CARC (Dean of Graduate School for graduate programs).
- June 1, 2009
  - Each CARC submits their summary and all APR's to the Office of the Provost
- Fall 2009
  - Summary report of the college reports is submitted by the Office of Assessment to the Provost

Questions?