

Direct Assessment of Student Learning Outcomes



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Purpose



- **Understand the difference between direct and indirect assessment**
- **To identify and describe direct forms of assessment**
- **Demonstrate the creation of a rubric for direct assessment of a learning outcome**

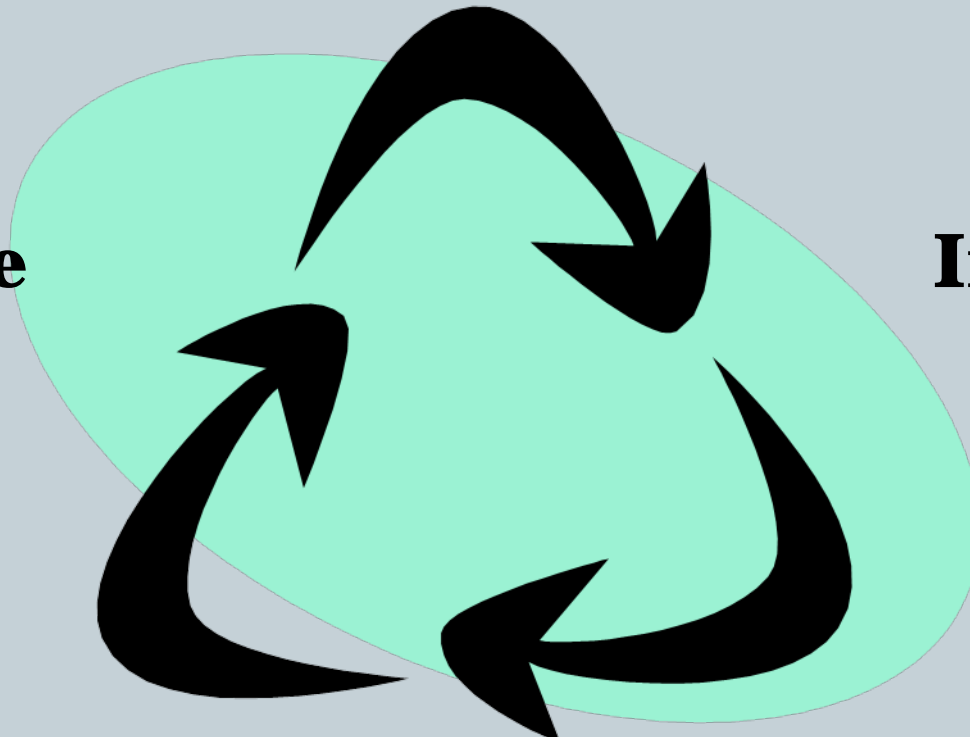
Learning or Program Planning Cycle



Plan

Implement

Improve



ASSESS

Learning Reconsidered



“Systematic and consistent assessment of student learning...when properly planned and implemented, can help institutions set priorities allocate resources, and enhance student outcomes.”

Learning Reconsidered, NASPA/ACPA, 2004, p. 23

Middle States - Guiding Principle 5



Assessment should involve the systemic and thorough collection of direct and indirect evidence of student learning at multiple points in time and in various situations, using a variety of qualitative and quantitative methods that are embedded in courses, programs and overall institutional processes.

Student Learning Assessment: Options and Resources, Second Edition, 2007)

What is assessment



Assessment is the ongoing process of:

- **Establishing clear, measurable expected outcomes of student learning**
- **Ensuring that students have sufficient opportunities to achieve those outcomes**
- **Systematically gathering, analyzing, and interpreting evidence to determine how well student learning matches our expectations**
- **Using the resulting information to understand and improve student learning**

Qualitative and Quantitative



Quantitative – predetermined response options that can be summarized into numbers - places interpretative value on numbers

- survey ratings, test scores, rubric scores, descriptive statistics

Qualitative – flexible, naturalistic methods usually analyzed by looking for recurring themes - places interpretative value on the observer

- observations of group interaction, individual performance, journal entry

Quantitative Assessment



- Historically have valued quantitative methods of interpretation
- Validity and reliability
- Quick and easy adoption and efficient scoring
- Presents results against national norms
- One possible source of evidence of learning

Quantitative Methods do not usually provide...



- Evidence of strategies, processes, ways of knowing, understanding, and behaving that students draw upon to represent learning
- Evidence of complex and diverse ways in which humans construct and generate meaning
- Highly useful results that relate to pedagogy, curricular or program design, sets of educational practices

Qualitative Methods



- **Focus on integrated learning**
- **Provide opportunity for students to generate responses as opposed to selecting responses**
- **Provide opportunity for students to reflect on their performance**

Qualitative Methods do not usually provide....



- Immediate reliability and validity (unless there has been a history of use)
- Easy scoring unless closed-ended questions are used
- Ease of use... can be more labor intensive

Indirect Assessment



Indirect assessment learning is inferred instead of being supported by direct evidence (i.e., usage data, satisfaction surveys). Students reflect on learning rather than demonstrate it.

Palomba, C.A., & Banta, T.W. (1999), *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*; Jossey-Bass Publishers, San Francisco

Indirect Assessment in Student Affairs



- Satisfaction surveys (NSSE, CIRP, etc.)
- Evaluations
- Attendance rates
- Usage data
- Quality measures
- Focus groups

Indirect assessment is very useful when determining if a student likes or enjoys an event, activity, or program, – it is *perception* of learning

Direct Assessment



In direct assessment students display knowledge or skills as the result of an assessment measure (presentation, test, etc). Direct measures of student learning require students to display their knowledge and skills as they respond to the instrument itself. Objective tests, essays, presentations, and classroom assignments all meet this criterion.

Palomba, C.A., & Banta, T.W. (1999), *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*; Jossey-Bass Publishers, San Francisco

Direct Assessment Techniques



- **Pre/Post test**
- **Direct Observation**
- **Video Observation**
- **Reflection Papers**
- **Demonstrations**
- **Interviews (not focus groups)**
- **Competitions**
- **Portfolios**
- **Training Others**
- **Work Groups**

Pre/Post Test



- Opportunity to test over time – training programs
- Good when you have a defined topic and “right” answers
- Takes preparation to ensure you are asking the right questions
- Can determine what student learned from training
- Also determine what wasn’t learned and change the training

Observation



- Opportunities for students to demonstrate learning and skill development
- Meetings, leading a workshop , group process around a decision to be made, performing skill set – behind closed doors (RA training module)
- Can be peer review, advisor, supervisor

What is a Rubric?



A scoring tool that lays out the specific expectations for an assignment.

Stevens, D.D. and Levi, A., (2005), *Introductions to Rubrics: An assessment tool to save grading time, convey effective feedback and promote student learning*. Sterling, VA: Stylus Publishers

Why Use a Rubric?



- Provides detailed data or “map”
- Clearly communicates performance expectations
- Provides consistency in evaluation – removes bias in evaluation

Using a Rubric for Feedback



- Can be used as a self-assessment tool
- Can be completed by supervisor, advisor or peers
- Can be a repeated measure – baseline and again at the end of the program/experience/year
- Provides tangible descriptions of observable behavior goals

Collins, K & Roberts, D (2012), Learning is Not a Sprint: Assessing and documenting student leader learning in co-curricular involvement. NASPA, Washington DC

Rubric Development



- Identify the learning outcome you want students to achieve
- Determine how you will obtain the evidence
- Develop the rubric to be used
- Test the rubric
- Train evaluators (if more than one)
- Collect and analyze the data

SD Learning Outcome



As a result of actively participating in a student centered community, students will:

- **Reflect and effectively communicate their thoughts, opinions, and ideas to the entire community**

Rubric Development



- Use actions verbs – related to learning outcomes
- Make sure it is measureable/observable/or artifacts
- Describe the action in specifics
- Determine how many levels (5 or fewer)

Analytic Rubric



- An analytic rubric consists of a grid with:
 - the criteria for a student product listed in the left column
 - levels of performance listed across the top row often using numbers and/or descriptive tags
 - cells within the center of the rubric may be left blank or may contain descriptions of what the specified criteria look like for each level of performance.

Each of the criteria is scored individually.

Rubric Example



	Level 4	Level 3	Level 2	Level 1
Dimension 1	Description	Description	Description	Description
Dimension 2				
Dimension 3				
Dimension 4				

Rubric Example



	Exemplary	Proficient	Marginal	Unacceptable
Dimension 1	Description	Description	Description	Description
Dimension 2				
Dimension 3				
Dimension 4				

Rubric Example



	Exemplary	Proficient	Marginal	Unacceptable
Talking	Description	Description	Description	Description
Context				
Listening				
Sensitivity				

Rubric example



	Exemplary	Proficient	Marginal	Unacceptable
Talking	Uses words, terms, and examples which others clearly understand.	Most words, terms, and examples are clearly understood. Some jargon may be present.	Uses confusing words and terms; uses examples that to some degree, help listener to understand.	Uses confusing words, terms, and/or examples which listener does not understand.

Rubric Example



	Exemplary	Proficient	Marginal	Unacceptable
Context	Is fully aware of the audience; changes language, demeanor, and delivery to best match the audience.	Is aware of the audience; occasionally changes language, demeanor, and delivery to best match the audience.	May be aware of different individuals but makes little effort to change language, demeanor, or delivery.	Is unaware the audience and makes no effort to change language, demeanor, or delivery.

Pros and Cons of Analytic Rubric



PROS

- Provide useful feedback on areas of strength and weakness.
- Criterion can be weighted to reflect the relative importance of each dimension.

CONS

- Takes more time to create and use than a holistic rubric.
- Unless each point for each criterion is well-defined raters may not arrive at the same score

Holistic Rubric



- A holistic rubric consists of a single scale with all criteria in the evaluation being considered together (e.g., clarity, organization, and presentation).
- With a holistic rubric the rater assigns a single score (usually on a 1 to 4) based on an overall judgment of the student work.
- The rater matches an entire “piece” of student effort to a single description on the scale.

Holistic Rubric Example



- **Reflect and effectively communicate their thoughts, opinions, and ideas to the entire community**
 - **Above average**
 - **Sufficient**
 - **Developing**
 - **Needs Improvement**

Above Average



- Student uses a clear voice and correct use of words or terms so that all listening can understand
- Student maintains eye contact with audience – good non-verbals
- Student demonstrates full knowledge (more than required) by answering all questions with explanations and elaboration
- Student presents information in logical, interesting sequence which audience can follow

Sufficient



- Student uses a clear voice and most of the words and terms are used correctly. Most listening in audience can understand
- Most of the time student uses appropriate non-verbals and eye contact
- Student is able to answer questions but not able to elaborate on responses
- Student presents information in a logical way which most can follow

Pros and Cons of Holistic Rubrics



PROS

- Emphasis on what the learner is able to demonstrate, rather than what s/he cannot do.
- Saves time by minimizing the number of decisions raters make.
- Can be applied consistently by trained raters increasing reliability.

CONS

- Does not provide specific feedback for improvement.
- When student work is at varying levels spanning the criteria points it can be difficult to select the single best description.
- Criteria cannot be weighted.

Rubric Resources



- Google it!
- AACU - <http://www.aacu.org/value/rubrics>
- National Institute for Outcomes Learning Assessment:
<http://www.learningoutcomeassessment.org>
- <http://www.rcampus.com/indexrubric.cfm>