Developing Outcomes-based Assessment for Learner-centered Education

AMY DRISCOLL
Mt. San Jacinto Community College District
January 28, 2011
Key Ideas

- Hallmarks of a Learner-centered Education
- A Process for Developing Learning Outcomes
- Designing Learner-centered Courses, Programs, and Pedagogy
- Cycle of Assessment
- Improved Learning
Hallmarks of a Learner-centered Education

- Curriculum
- Pedagogy
- Assessment
Learner-centered Curriculum

- Synthesizing content
- Builds on previous learning
- Integrating education and experience
- ...
- ...
Learner-centered Pedagogy

- Students have clear expectations
- Students are actively involved
- Students apply knowledge to important issues and problems
- Students find relevance and value
- ...
- ...
- ...
Learner-centered Assessment

- Assessment is ongoing not episodic
- Students understand and value the criteria, standards, and methods by which they are assessed
- The purpose of assessment is to improve student learning
- ....
- ....
Determining Purpose(s)

- Describe educational culture
- Study list of possible purpose(s)
- Eliminate offenders
- Identify gaps
- Prioritize with rationale(s)
- Develop definition
Review of Mission and Values

- Does assessment flow from the institution’s mission and reflect the educational values?

- Does assessment address questions that people really care about?
Aligning Mission with Educational Goals

- Our central mission is to develop **life-long learning skills**, impart society’s cultural heritage, and educate and prepare for both the professions and advanced study.
Aligning Values With Educational Goals

- ESU has a commitment to academic and personal integrity.

**GOALS:** Academic Integrity
Personal Integrity
Assessment Protocols

GOAL

OUTCOMES

Evidence

Criteria

Standards:
  a) Exemplary Achievement
  b) Satisfactory Achievement
  c) Unsatisfactory Achievement
Goals

- Broad descriptions
- Categories of learning outcomes
- End toward which efforts are directed
Examples of Goals

- Critical Thinking
- Citizenship
- Science Literacy
- Ethics
Impact of Goals on Student Learning

- Focuses student learning efforts
- Translates mission and values
- Provides rationale for curriculum and pedagogy
Outcomes

- Refer to Results in Terms of Specific Student Learning, Development, and Performance (Braskamp and Braskamp, 1997)

- Answer the Question – “What Do We Expect of Our Students?” (CSU Report 1989)

- Describe Actual Skills, Understandings, Behaviors, Attitudes, Values of Students
Examples of Outcomes

Math
1. Use arithmetical, algebraic, geometric and statistical methods to solve problems.

Ethics
1. Identify and analyze real world ethical problems or dilemmas and identify those affected by the dilemma.

Culture and Equity
1. Analyze and describe the concepts of power relations, equity, and social justice and find examples of each concept in the U.S. society and other societies.
Impact of Outcomes on Student Learning

- Directs student learning efforts
- Motivates student learning efforts
- Promotes deep learning due to understanding of expectations
Evidence

- Student Work that Demonstrates Achievement of Outcomes (Assignments, Projects, Presentations, Papers, Responses to Questions, Etc.)

- Opportunity for Different Ways of Demonstrating Learning
Examples of Evidence

Math
- Mathematical and statistical projects and papers

Ethics
- A written account
- A multi-media presentation
- A display board
- A role-play or dramatization
- Lyrics of a musical score
- An audio tape
Impact of Evidence on Student Learning

- Limit or expand the ways they demonstrate learning
- Enrich and enhance learning
- Provide opportunity to integrate experience with learning
Criteria

- Qualities Desired in Student Work (Evidence)
- Represent Powerful Professional Judgment of Faculty
- Guide Student Learning Efforts
- Promote Lifelong Learning
- Support Faculty in Making Objective Evaluations
Examples of Criteria

Math
- Accuracy
- Complexity
- Appropriateness
- Clarity and Coherence
- Depth of Understanding

Ethics
- Complexity (broad, multifaceted, interconnected)
- Conscious Awareness
- Depth of Understanding
- Coherence and Logic

Culture and Equity
- Range of Cultures
- Communication
- Reflectivity and Integration
Impact of Criteria on Student Learning

- Promotes confidence in their learning efforts
- Promotes qualities of life-long learning
- Promotes habits of self assessment
- Promotes student’s sense of fairness of evaluation
Standards

- Describe Different Levels of Criteria
- Describe Specific Indications of Criteria
- Promote Understanding of Criteria
- Support Faculty in Making Objective Evaluations
Examples of Standards

Math (Accuracy)

- **Satisfactory**: Contains few errors and those errors do not significantly undermine the quality of the work.
  Considers and uses data, models, tools or processes that reasonably and effectively address issues or problems.
- **Unsatisfactory**: One or more errors that significantly undermine the quality of the work.
  Uses data, models, tools or processes in inappropriate or ineffective ways.

Ethics (Complexity)

- **Standard for Excellent**: Consistently views sophisticated and significant dilemmas and issues with a broad focus and from multiple perspectives.
- **Standard for Satisfactory**: Usually views sophisticated and significant dilemmas and issues with a broad focus, but may sometimes use a more narrow focus and may use fewer perspectives.
- **Standard for Unsatisfactory**: Mainly views issues and dilemmas in simple terms and usually does so with a limited focus and minimal perspectives.
Impact of Standards on Student Learning

- Guides level of student investment
- Provides insight into the assessment process
- Promotes confidence in how their work will be evaluated
RUBRICS

- Criteria communicate the qualities in student work that supports achievement of the LO’s
- Standards communicate the levels of work quality that are rated along a continuum of Excellent to Unacceptable
Assessment Protocols

GOAL

OUTCOMES

Evidence

Criteria

Standards:
a) Exemplary Achievement
b) Satisfactory Achievement
c) Unsatisfactory Achievement
Assessment Sample

- Educational Goal
  - Personal integrity

- Outcomes
  - Students articulate an individual code of ethics and apply it to personal decisions of integrity
  - Student describe and assume personal responsibility in collaborative endeavors, and respect and support the responsibilities of others
Personal Integrity

- Evidence
  - Written code with discussion of two different decisions
  - Multimedia presentation
  - Letter of application for professional position
  - Dramatization of ethical issues

- Criteria
  - Reflection
  - Multiple perspectives
Personal Integrity

Standards

- Excellence in Reflection: Consistently raises questions, checks assumptions, connects with previous experiences, acknowledges biases and values and engages in self-assessment

- Excellence in Multiple Perspectives: Examines thinking and experiences of others, considers those affected by decisions and responsibilities, and considers diverse courses of action
Designing Learner-centered Curriculum and Pedagogy

- Learning is enhanced when teaching and learning processes are aligned with outcomes
- Outcomes build links between teaching, curriculum, learning, and assessment
- Teaching and assessment build on each other
Assessing Student Learning: Course, Program and Institutional Levels

1. Preparation: Determine purpose(s) and definition of assessment; Examine mission and values

2. Design assessment: Articulate goals, Develop clear outcomes, evidence, criteria, and standards

3. Alignment of curriculum and pedagogy with learning outcomes

4. Make outcomes, evidence, criteria, and standards “public and visible” (syllabi, programs, brochures)

5. Collect evidence of student achievement

6. Review and analyze student evidence

7. Revise outcomes and criteria, Improve pedagogy and curriculum for learner success
Aligning Curriculum and Pedagogy with Learning Outcomes

- Program Alignment Grids (curricular mapping)
- Faculty Alignment Grids
- Learner Grids
Making Learning Outcomes – Public and Visible
Relevant and Meaningful
Motivating and Supportive of Learning
Step 5: Collect Evidence of Student Achievement

- Collect representative samples (3 Exemplary, 3 Satisfactory, 3 Unsatisfactory)
Step 5: Review and Analyze Evidence

- Read holistically to determine whether outcomes are achieved (reliability).
- Several readings to identify examples of criteria (validity).
- Final reading for insights about pedagogy, class structure and environment, and learning supports.
Step 6: Process Results

- Documentation of student achievement of outcomes
- Clarification of outcomes, criteria & standards
- Improved alignment of assignments/assessments with outcomes
- Enhanced pedagogy to support student achievement of outcomes
Clarification of Outcomes, Criteria, and Standards

- Outcomes meant different things to different faculty
- Process facilitated community discussion of meaning of outcomes
- Drew attention to assumptions regarding language and philosophy
- 90% of GE faculty learning communities changed outcomes, criteria, or standards
Changes in Teaching, Assessment and Reflection on Pedagogy

- Scaffolding
- Iterative assessment
- Assessment as a valuable teaching tool
- Excellent tool for reflecting on pedagogy
Processes for Developing Learner-centered Education

- Develop purpose and definition
- Review/analyze mission and values
- Articulation of goals, outcomes, evidence, criteria, and standards
- Designing curriculum and pedagogy
- Collaborative review of student evidence
- Use review to improve learning