

Different Strategies for Online Assessments

Online Assessment and Student Learning Outcomes

(Some materials excerpted in from Thomas A. Angelo and
K. Patricia Cross's *Classroom Assessment Techniques: A
Handbook for College Teachers (2nd Edition)*, Jossey-Bass
Publishers, 1993.)

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Why Assess?

- ❖ Tailor the teaching to fit the needs and cognitive standings of the students (as a continuous process during the course)
- ❖ Alleviate the gap between what was taught and what was learned
- ❖ Angelo and Cross suggest that the optimal sorts of “classroom assessment” is “learner-centered, teacher-directed, mutually beneficial, formative, context-specific, ongoing, and firmly rooted in good practice.” (1993, p. 4)

Why Assess?

- ❖ Gain regular feedback from students
- ❖ Connect with learners
- ❖ Create a sense of responsibility of learners in their work
- ❖ Reiterate course goals and objectives to make these explicit throughout the course
- ❖ Have reasons for appropriate and focused feedback throughout the semester



Why Use Different Types of Assessment?

- ❖ Accommodate different learners with different learning preferences and/or learning disabilities
- ❖ Promote a greater amount of interaction and mutual communications
- ❖ Develop a deeper sense of learning and intellectual challenge in this learning community

(General) Student Learning Outcomes in Mediated Education

- ❖ Evolve a greater sense of community and teamwork for constructivist learning and student retention
- ❖ Promote a stronger sense of individual identity and self-expression, self-discovery
- ❖ Support a professional field-specific mindset and commitment to values and ethics

(General) Student Learning Outcomes in Mediated Education

- ❖ Master high technology (for learning, for research)
- ❖ Develop more analytical, problem-solving, synthesizing, holistic thinking, inference drawing, creative thinking, application of logic, differentiation between fact and opinion skills
- ❖ Understand and practice standards setting within the field regarding practices, measures, ethics, and others

(General) Student Learning Outcomes in Mediated Education

- ❖ Improve listening, speaking, reading and writing skills (communications skills online)
- ❖ Develop self-management and leadership skills
- ❖ Support self-efficacy, academic confidence and judgment
- ❖ Advocate field specific student outcomes*

Bloom's Taxonomy



- ❖ Knowledge
- ❖ Comprehension
- ❖ Application
- ❖ Analysis
- ❖ Synthesis
- ❖ Evaluation
- ❖ Creativity (added)

Initial Points to Consider in Creating Online Assessments

- ❖ **Begin with “What do you want to know? Is it assessable?”**
- ❖ **Consider, “What’s the best way to surface this information with the most efficient use of both student and faculty time?”**
- ❖ **Consider, “What is the most fair, objective and efficient way to gain this information?”**
- ❖ **Consider, “How will I use this information to enhance student learning? Will this assessment benefit student learning?”**

Standards for Online Assessment

- ❖ “Is it **context-sensitive**? Will the assessment technique provide useful information on what a specific group of students is or is not learning about a clearly defined topic at a given moment in a particular classroom?”
- ❖ Is it **flexible**?...and possibly useful in a range of disciplines?

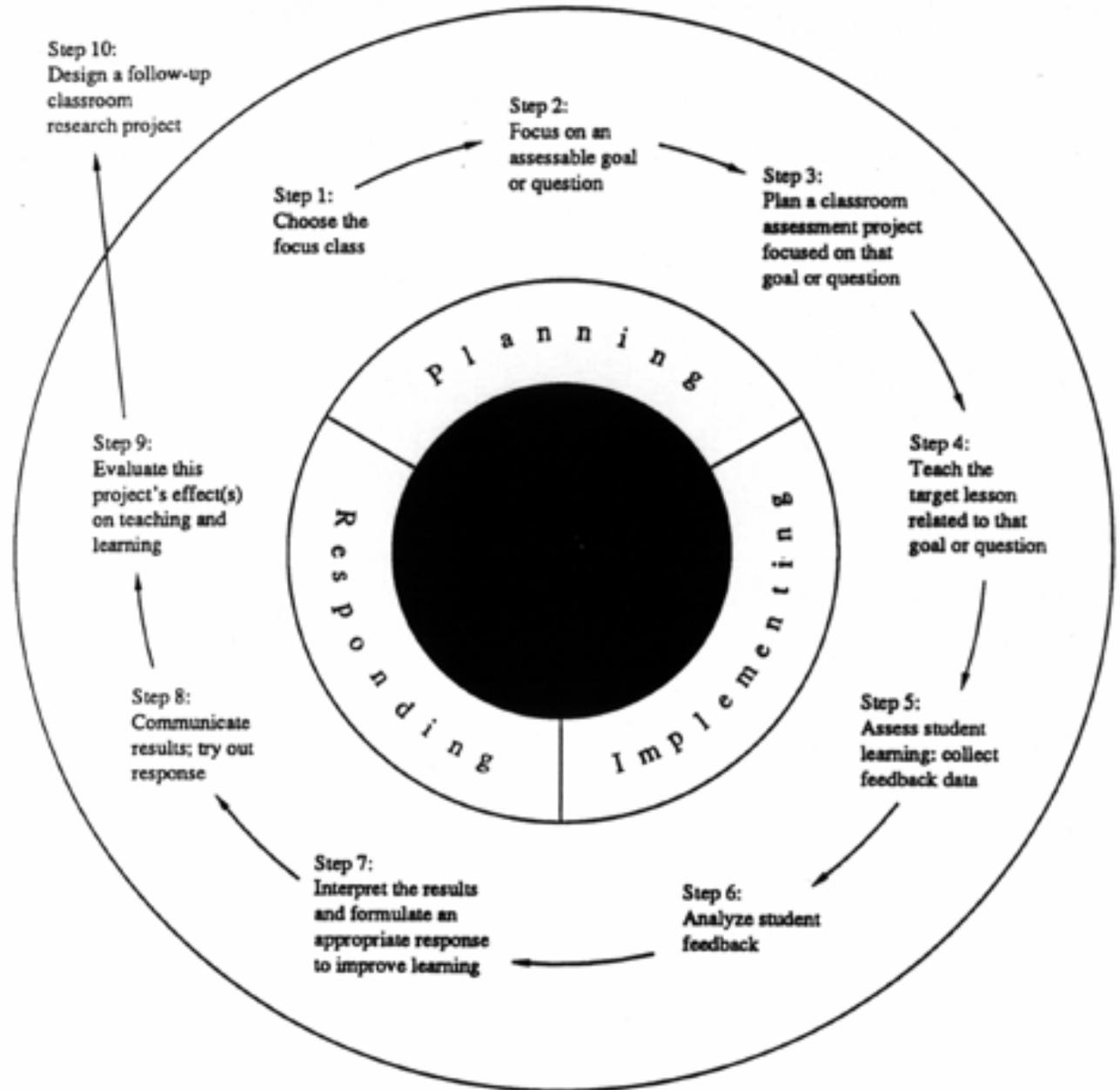
Standards for Online Assessment

- ❖ “Is it likely to **make a difference**? Does the technique focus on ‘alterable variables’?...”
- ❖ Is it **mutually beneficial**? (to both students and instructors?)
- ❖ Is it **easy to administer**? Is it **easy to respond to**?
- ❖ “Is it **educationally valid**? Does it reinforce and enhance learning of the specific content or skills being assessed?” (Angelo and Cross, pp. 26 - 27)

Planning

Implementing

Responding



Formal or Informal Assessment Methods?

FORMAL (mandatory, impact on grade, recorded individually):

- ❖ Exams (quizzes, tests)
- ❖ Assignments (term papers, lab reports, homework, presentations, slide shows)
- ❖ Experiments
- ❖ Fieldwork

INFORMAL (optional, low-impact, not recorded or used in the aggregate):

- ❖ Online discussions
- ❖ Posted queries
- ❖ Interactions between student peers in discussions (student-initiated as well as faculty-initiated)

Automated or Customized Assessments?

AUTOMATED (close-ended options)

- ❖ Prewritten T/F and multiple choice exams

CUSTOMIZED (student choice)

- ❖ Short answer exams
- ❖ Essay exams
- ❖ Papers
- ❖ Research projects

Different Types of Assessment Methods: **PRIOR KNOWLEDGE, RECALL AND UNDERSTANDING**

- ❖ **Background knowledge probe** (to determine where to begin instruction, help learners acclimate to topic)
- ❖ **Focused listing** (important points related to a topic)
- ❖ **Misconception/ preconception check** (surface ideas that may hinder accurate further learning)
- ❖ **Empty or partial outlines** (comprehension)
- ❖ **Memory matrix** (categorization of ideas)
- ❖ **Minute paper** (most important learning, what remains unanswered)
- ❖ **Muddiest or most confusing point** (Angelo and Cross, pp. 119 – 158)

Different Methods for Online Assessment: ***ANALYTICAL SKILLS, CRITICAL THINKING***

- ❖ **Categorizing grid** (explicit understanding of implicit categorizing of ideas, people, or objects)
- ❖ **Defining features matrix** (presence or absence of defining features, + or -)
- ❖ **Pro and con grid** (costs and benefits of an issue of mutual concern)
- ❖ **Content, form and function outlines** (what, how and why of a mediated message for communications savvy)
- ❖ **Analytic memos** (discipline-specific approaches, methods and techniques for simulation exercise)
(Angelo and Cross, pp. 159 – 180)

Different Methods for Online Assessment: ***SYNTHESIS & CREATIVE THINKING***

- ❖ **One-sentence summary** (concision and comprehensiveness regarding a lot of information)
- ❖ **Word journal** (choice of a word to describe a short text and then a paragraph explaining the word choice)
- ❖ **Approximate analogies** (A is to B as X is to Y)
- ❖ **Concept maps** (drawings or diagrams)
- ❖ **Invented dialogues** (interweaving of actual quotes from primary sources or reasonably invented quotes)
- ❖ **Annotated portfolios** (student work and explanations/analyses of that work) (Angelo and Cross, pp. 181 – 212)

Different Methods for Online Assessment:
PROBLEM SOLVING & METACOGNITION

- ❖ **Problem recognition tasks** (principles and techniques needed to solve problems)
- ❖ **What's the principle?** (principles that cause problems, the use of principles to solve them)
- ❖ **Documented problem solutions** (identifying steps needed to solve problems and then documenting those steps)
- ❖ **Audio and videotaped protocols** (using videotaping to see how students solve problems)
(Angelo and Cross, pp. 213 to 230)

Different Methods for Online Assessment:
***SKILL IN APPLICATION &
PERFORMANCE*** (conditional knowledge or “when
and where” to apply knowledge)

- ❖ **Directed paraphrasing** (ability to paraphrase difficult concepts)
- ❖ **Applications cards** (possible relevance and applications of new knowledge)
- ❖ **Student-generated test questions** (what students consider the most important learning)
- ❖ **Human tableau or class modeling** (kinesthetic learning)
- ❖ **Paper or project prospectus** (brief structured first-draft plan for a term paper or project) (pp. 231 – 256)

Different Methods for Online Assessment: **ATTITUDES AND VALUES**

- ❖ **Classroom opinion polls** (student preexisting opinions that may distort or block instruction)
- ❖ **Double-entry journals** (relevant info on one column and personal responses on others)
- ❖ **Profiles of admirable individuals** (choosing a role model from a field)
- ❖ **Everyday ethical dilemmas** (identify personal values to course and field related ones)
- ❖ **Course-related self-confidence surveys** (student sense of ability to learn relevant skills and materials) (Angelo and Cross, pp. 257 – 279)

Different Methods for Online Assessment: ***SELF-AWARENESS AS LEARNERS***

- ❖ **Focused autobiographical sketches** (self-concept and self-awareness)
- ❖ **Interest/ knowledge/ skills checklists** (student rating of interest re: set topics and his/her own respective levels of skill or knowledge)
- ❖ **Goal ranking and matching** (degree of fit between student's personal learning goals and teacher's course-specific instructional goals and their respective rankings of the relative importance and difficulty of the goals)
- ❖ **Self-assessment of ways of learning** (types of learning preferences) (Angelo and Cross, pp. 280 – 298)

Different Methods for Online Assessment:
***COURSE-RELATED LEARNING, STUDY
SKILLS and BEHAVIORS***

- ❖ **Productive study-time logs** (“thumbnail records” about how much time was spent on particular coursework)
- ❖ **Punctuated lectures** (on-the-spot querying about how much students are learning from an online lecture or demonstration, for asynchronous online only)
- ❖ **Process analysis** (actual steps students take to do academic work)
- ❖ **Diagnostic learning logs** (main points understood, main points not understood) (Angelo and Cross, pp. 299 – 319)

Different Methods for Online Assessment: **REACTIONS TO TEACHERS & TEACHING**

- ❖ **Chain notes** (starting a word file and having people add to it in one long response)
- ❖ **Electronic mail feedback** (questions posed about class with immediate response)
- ❖ **Teacher-designated feedback forms** (mid-course adjustments)
- ❖ **Group instructional feedback technique** (“What works? What doesn’t? What can be done to improve it?”)
- ❖ **Classroom assessment quality circles** (grouped learners sharing insights online, discussion and collective insights forwarded to the class and instructor)
(Angelo and Cross, pp. 320 – 342)

Different Methods for Online Assessment: **REACTIONS TO CLASS ACTIVITIES, ASSIGNMENTS & MATERIALS**

- ❖ **RSQC2** (Recall, Summarize, Question, Comment, and Connect) (instructor recall of a session vs. a student's recall)
- ❖ **Group-work evaluations** (assessment of cooperative learning)
- ❖ **Reading rating sheets** (student evaluations of their own course readings)
- ❖ **Assignment assessments** (learning value of the homework and projects from student perspective)
- ❖ **Exam evaluations** (effectiveness of exams) (Angelo and Cross, pp. 343 – 361)

Other Approaches to Online Assessments

- ❖ **Student choice** (selection from a variety of works with points attached and a final grade extrapolated from the total)
- ❖ **Group assessment** (group assessment work and group response)
- ❖ **Uses by students** for their own learning and self-awareness

Logistics Questions for Instructors

- ❖ What ‘assessable’ question are you trying to answer?
- ❖ What specific Classroom Assessment Technique or instrument(s) will you use to collect data?
- ❖ How will you introduce the assessment activity to students?
- ❖ How will you integrate it into ongoing classroom activities?
- ❖ What technique will you use to collect feedback?

Logistics Questions for Instructors (cont.)

- ❖ Realistically, how much time can you devote to this project?
- ❖ Will that be enough time to accomplish what you are planning?
- ❖ What will a successful outcome look like?
- ❖ What is the minimum outcome that you would consider worthwhile?
- ❖ What steps can you take to ‘build in’ success? (Angelo and Cross, p. 49)

CONCLUSION