Effective Online Assessment: Scalable Success Strategies

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Objectives

Identify a specific focus area for today’s session

Explore the Assessments tool options available

Provide examples of application-based assessment content
Focal Points

“Do you expect technology to compensate for a lack of ethics?”
Charles Dzuiban, PhD, RITE

No magical way to prevent cheating

Cheating occurs in all educational modalities
Focal Points

No such thing as a “closed book” assessment in online courses

Authentic assessment can be activities, assignments, quizzes, or exams

Focus must be on student learning, not student control
Assessments Tool Features

**Randomization**
- Assessment alternatives (i.e., Test A or Test B)
- Assessment questions
- Use of question sets, categories, levels of difficulty
- Student groupings (specific tests available to specific students)

**Assessment time limits**
- Restricted or unlimited
- How long is an assessment available to students?
- Questions displayed one at a time or all at once?
Assessments Tool Features

**Rules for assessment completion**
- Complete when launched first time
- Save and come back to it later

**Proctoring**
- Assessment alternatives should be considered
- Need to consider geographical constraints
Design Strategies

How to use strategic assessment to promote learning and discourage temptation

Focus on application, rather than memorization
Strategic Assessment

• Emphasize critical thinking
• Create questions that emphasize higher levels of Bloom’s taxonomy
  – Knowledge
  – Comprehension
  – Application
  – Analysis
  – Synthesis
  – Evaluation
Strategic Assessment

• Aim to promote transfer

• Consider collaborative assessment that requires synthesis of knowledge = individual + group assessment
True/False

• Good
  ▫ One of cause of the Civil War were differences concerning the elimination of slavery.

• Better
  ▫ The type of individual that would support abolitionism would likely be a rural farmer or capitalist.
Multiple Choice

- Good
  - The greatest criticism of well-designed true experimental research is?

  a. inability to replicate findings
  b. does not address classroom issues
  c. questionable generalizability
  d. high external validity
Multiple Choice

• Better
  ▫ Three of the four following teachers are using scaffolding to help their students learn. Which one is NOT necessarily providing scaffolding?

  a. Ms. Aimee gives her students a structure to follow when they write their first essay.
  b. Ms. Randi teaches a backhand tennis swing by gently guiding each student through the correct movement a few times.
  c. Ms. Terri gives her class some hints about how to solve an especially difficult word problem.
  d. Mr. John takes his students on a field trip to the art museum.
A teacher notices that her students have a tendency to cheat on tests. What strategy would be best to discourage cheating?

a. Implement strict time limits
b. Use criterion referenced assessment
c. Administer all tests in-person
d. Assess synthesis of knowledge
Other Strategies

- Interpretation of charts/graphs
- Have students design assessments
- Require answer justification (why is the answer correct?)
- Peer evaluation of reflections/essays
- Experimental interpretation - analysis of research based findings (sciences)
Activity 1: Rewrite the Question

Biology Example: Knowledge Recall

Ribosomes are important for:

a) the nucleus

b) DNA

c) Cellulose

d) Protein synthesis*
Activity 1: Suggested Answer

Biology Example: Knowledge Application

Suppose you thoroughly and adequately examined a particular type of cell, using the transmission electronic microscope, and discovered that it completely lacked ribosomes. You would then conclude that this cell also lacked:

a) A nucleus
b) DNA
c) Cellulose
d) Protein synthesis*
Activity 2: Which Item is Better?

4A. Which of the following is a category in the taxonomy of the cognitive domain?
   A. Reasoning ability
   B. Critical thinking
   C. Rote learning
   D. All of the above
   E. None of the above

4B. What is the most complex level in the taxonomy of the cognitive domain?
   A. Knowledge
   B. Synthesis
   C. Evaluation
   D. Analysis
   E. Comprehension
Activity 2: Best Question

4A only asks for **simple identification** of a category and also contains “all of the above” and “none of the above” as option choices, which should be avoided, if possible. (recall)

4B is the better item as it asks for **differentiation** between levels. (comprehension)
Resources Available


• Seminar Resources: http://bit.ly/online_assessment
  ▫ Assessment strategies & tips; learning taxonomies
  ▫ Sample test & activity items and background
  ▫ Webcourses@UCF Assessments tool resources
  ▫ External assessment resource web sites
  ▫ Summary of concerns, questions, ideas
  ▫ Seminar recording for review