Creating tests/assignments that encourage learning
WHAT IS THE MAIN PURPOSE OF YOUR TESTS/ASSIGNMENTS?
Grading directs time and energy

Grading is teaching
Summative
- Use multiple methods
- Assess multiple dimensions
- Use multiple assessors
- Assess over time

Formative
- Frequent and timely feedback
- Precise feedback
- Students using feedback
- Changing course content or teaching methods when needed
Steps for creating assessments

1. Identify Learning Outcomes
2. Match assessments to outcomes
3. Provide students with opportunities to achieve those outcomes (practice)
4. Design specific assessments
   ◦ Match items to desired outcomes
   ◦ Pilot test
   ◦ Administer
   ◦ Grade
   ◦ Review results with students/feedback
   ◦ Conduct item analysis
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The Importance of Learning Outcomes

3 Questions
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Examples

- Given a short story, the student will write a different but plausible ending.

- From memory, with 80 percent accuracy, the student will match each United States General with his most famous battle.

- Given fractions not covered in class, the student will multiply them on paper with 85 percent accuracy.

- Given a description of a country’s economic system, the student will defend it by basing arguments on principles of socialism.

Examples from: Writing Good Multiple-Choice Exams, Dawn M. Zimmaro, Ph.D., University of Texas at Austin
<table>
<thead>
<tr>
<th></th>
<th>Topic A</th>
<th>Topic B</th>
<th>Topic C</th>
<th>Topic D</th>
<th>TOTAL</th>
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<td>Evaluation</td>
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<td>1 (2.5%)</td>
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<td>Understands Concepts</td>
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<td>20</td>
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<td>7</td>
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World War II was:

a) The result of the failure of the League of Nations.
b) Horrible.
c) Fought in Europe, Asia, and Africa.
d) Fought during the period of 1939-1945.
During what age period is thumb-sucking likely to produce the greatest psychological trauma?

a) Infancy
b) Preschool period
c) Before adolescence
d) During adolescence
e) After adolescence
Frequent use of sprays, oils, and antiseptics in the nose during a bad cold may result in:

a) congestion
b) olfactory nerve
c) the spreading of the infection to the sinuses
In 1965, the death rate from accidents of all types per 100,000 population in the 15-24 age group was:

a) 59.0
b) 59.1
c) 59.2
d) 59.3
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3. Find $x$.

Here it is.

(d) Explain why phosphorus trichloride ($\text{PCl}_3$) is polar.

God made it that way.
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Item Difficulty

- Who wrote The Great Gatsby?
  a) Faulkner 4
  b) *Fitzgerald 16
  c) Hemingway 5
  d) Steinbeck 0

Total students 25

16/25 = .64
Formative/CATS
TECHNOLOGIES THAT SUPPORT GRADING
Audio/Video Enhanced Grading

The Significance of Groups and Teams in the Aerospace Industry

University of Denver University College
Capstone Project
for
Master of Leadership and Organizations
July 23, 2010
• http://flashmedia2.du.edu/relay/RobinBrown - Web (1024x768) - 20100221_12.05.29PM.html

• http://flashmedia2.du.edu/relay/Lauren_Beam_Capstone_Review_072210 - Flash (Large) - 20100722_03.25.44PM.html