Assessment — Who, What, Why

Cameron H. G. Wright and Jerry C. Hamann
University of Wyoming
Department of Electrical and Computer Engineering
chgw@uwyo.edu, hamann@uwyo.edu

August 25, 2017

Abstract
Assessment, grading, evaluating, call it what you may, it is a many-faceted beast, with a lot of players involved and many expectations (not all of which are compatible). We examine the basics, look at the partnership with teaching assistants and graders, then finish the tour with students “grading” the instructor. We leave more questions unanswered than answered.
Some Quotes from McKeachie’s Teaching Tips

- “What students learn depends as much on your tests and methods of assessment as on your teaching.”
- “Assessment is not synonymous with testing.”
- “After the course is over, students will not be able to depend on you to assess the quality of their learning.”
- “. . . assessment is not simply an end-of-course exercise to determine student grades.”
- “. . . tests are among the most frustrating aspects of the course to many students and arouse a great deal of overt and covert aggression.”

Is it really a surprise that students focus on grades!
Adding Fuel to the Fire with the Words We Choose!


**assessment**

*n.* 1. The act of assessing, appraisal.

**grade**

*n.* 2. A position in a scale of size, quality, or intensity: *a poor grade of lumber.*

... 6. A number, letter, or symbol indicating a student’s level of accomplishment.

*WordNet (R), Princeton University*

**assessment**

*n.* 1. The classification of someone or something with respect to its worth.
Selecting Our Words (and Reasons) Carefully

formative
adj.
... Susceptible to transformation by growth and development.

sum·ma·tive
adj.
... Aggregation, of a conclusive nature.

- Can we conclude that “homework” is largely formative?
- Are exams only summative?
- Why do we “grade” formative assignments?
- Why might we not grade a summative instrument?
- How should all of the pieces fit into a final semester grade?
- One exam, end of the semester, that’s it, a grade?
University Regulation 6-722 (Rev. 6/16/15) – Grading System . . .

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, A-</td>
<td>4.00, 3.67</td>
<td>(old language: Exceptional)</td>
</tr>
<tr>
<td>B+, B, B-</td>
<td>3.33, 3.00, 2.67</td>
<td>(old language: Very Good)</td>
</tr>
<tr>
<td>C+, C, C-</td>
<td>2.33, 2.00, 1.67</td>
<td>(old language: Fair)</td>
</tr>
<tr>
<td>D+, D</td>
<td>1.33, 1.00</td>
<td>(old language: Poor)</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td></td>
<td>Withdrawal</td>
</tr>
</tbody>
</table>

- "... pluses and minuses used at the discretion of the course instructor"
- How is this interpreted in terms of percentage of a “score?”
- Is a letter grade appropriate for both formative and summative instruments?
- What other ramifications-to-the-student are attached to grades?
  - The GPA (scholarship, loans, probationary status).
  - Failure to achieve satisfactory progress.
  - Undergraduate versus graduate expectations.
Working with Teaching Assistants and Graders and Grades

- The instructor of the course owns the responsibility for . . .
  - the final course grade,
  - the sequence of formative and summative assessments,
  - clear, concise instructions detailing the “scoring” and “feedback” provided with each assignment.

- According to FERPA, the instructor is the institutional officer responsible for safeguarding the privacy of student information, including “grades,” and all personal information.
  - Pros, cons and legality of posting student scores in public venues?
Rubrics: Keeping Everyone on the Same Page

- The word *rubric comes from the Latin word for red*. . .
  - any established mode of conduct or procedure; protocol
  - an explanatory comment
  - a direction for the conduct of “divine service”

- Lots of “pros” for writing and applying rubrics. . .
  - Establish your expectations at the outset
  - Provide clear instructions for yourself and TA/grader and students
  - Allow for return to situation even after protracted departure

- Can be extremely detailed or quite brief, depends on needs

For further investigation. . .

When the Tables Are Turned

- Students evaluate instructors each and every semester in each and every course, more or less (see University Regulation 5-800 for details).
- How accurate is student evaluation of...
  - teaching effectiveness,
  - fairness of the classroom and academic task,
  - expressed attitude of the instructor to the course and students?
- How are student evaluations utilized?
  - Formative?
  - Summative?