TOWARD A PEDAGOGY COMPATIBLE WITH EQUITABLE GRADING

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We desire accurate communication and understanding. If you have wonderings, questions, arguments, etc. please speak up.
**Typical Grading Practices** (from our experience)

- Use a 100-point (percentage) scale
- Have grade ranges similar to A:90-100, B:80-89, C:70-79, D:60-69, F:0-59
- Have several parts, e.g., homework, projects, quizzes, exams, attendance & participation, extra credit, group work, etc.
- Use homework grading as a major source of student feedback
- Assign zeroes to missing work/assessments
WHAT IS EQUITABLE GRADING?

• A book by Joe Feldman
• Grading practices that:
  • Are mathematically **accurate**, validly reflecting students’ academic performance
  • Are **bias-resistant**, preventing subjectivity from infecting grades
  • **Motivate** students to strive for academic success, persevere, accept struggles and setbacks, and to gain critical lifelong skills
TYPICAL GRADING PRACTICES

• Are not mathematically accurate
• Are not bias-resistant
• Do not motivate students
ACCURACY: THE 100-POINT SCALE
ACCURACY: ZERO FOR MISSING WORK

• 90/80/70/60 grade ranges  →  10 values for A,B,C,D and 60 for F
• A zero in one component lowers 2 B’s to an F
• Does missing work indicate a total lack of capability? How do you know?
### Accuracy: Grading Categories and Weightings

Should grades here be the same or different?

<table>
<thead>
<tr>
<th>Category</th>
<th>Category Weight</th>
<th>Student 1</th>
<th></th>
<th>Student 2</th>
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<tbody>
<tr>
<td></td>
<td>Score</td>
<td>Weight</td>
<td>Score</td>
<td>Weight</td>
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</tr>
<tr>
<td>Homework</td>
<td>30%</td>
<td>80%</td>
<td>.24</td>
<td>60%</td>
<td>.18</td>
</tr>
<tr>
<td>Tests &amp; Projects</td>
<td>40%</td>
<td>60%</td>
<td>.24</td>
<td>95%</td>
<td>.38</td>
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<tr>
<td>In-class Activity</td>
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<td>90%</td>
<td>.18</td>
<td>70%</td>
<td>.14</td>
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<tr>
<td>Participation</td>
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<td>100%</td>
<td>.10</td>
<td>60%</td>
<td>.06</td>
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<td><strong>Weighted Score</strong></td>
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• I had a student who failed for six weeks. I told him he was supposed to learn from his mistakes. His work improved, his grades got higher, and he was doing A-work at the end of the semester.

• What should his grade be?

• Why?
ACCURACY: NON-ACADEMIC PERFORMANCE

• Attendance & participation likely contribute to learning but don’t measure it
• Penalizing late work does not reflect academic capability
• Penalizing cheating does not reflect academic capability
• A group score does not reflect individual academic capability
• Extra credit (typically enrichment or advanced content) does not measure performance on course content—if it does it should be required, not extra
ADDITIONAL DISCUSSION re ACCURACY?
BIAS-RESISTANT: BUT I’M NOT BIASED

• We refer to unintentional bias—Bias-resistant practices value knowledge, not environment or behavior
  • Students come to our classes with different background knowledge
  • Students have outside-of-class circumstances that may restrict class-related activity
  • Students vary in how quickly they learn the content of our courses
Bias-Resistance: Some Issues

- Extra credit (typically enrichment or advanced content, not in course goals) gets used by those in a better position to profit (have resources, supports, stronger backgrounds, etc.)
- Late penalties are unrelated to actual capability and unduly burden students with few resources, weak prior knowledge, overwhelming life issues, stress, etc.
- Participation credit rewards compliant students and can be antithetical to some who may view it as “acting white” or putting oneself above the teacher
- Including homework/learning activity when grading favors those who already know the material or learn quicker or are “better” students
ADDITIONAL DISCUSSION re BIAS RESISTANCE?
Motivational: Research & Experience Suggestions

- Contingent extrinsic rewards—do this to get that—undermine intrinsic motivation (p.154)
- Extrinsic motivation lowers performance on creative or complex-thinking tasks and increases unethical behavior (p.155)
- Using (low) grades as punishment causes student withdrawal or low self-esteem (p.157)
- Point-based grades (and extra credit) focus student attention on points, not content
ADDITIONAL DISCUSSION re BIAS MOTIVATION?
**SUGGESTED ACTION: REVISE INSTRUCTION**

- Identify desired outcomes (including any soft skills)
- Create assessments covering all outcomes, perhaps a mix of individual & comprehensive assessments
- Create learning activities designed to develop each capability
  - Content presentation
  - Student Practice
  - Feedback to students
SUGGESTED ACTION: CREATE GRADING SYSTEM

• That uses zeroes **only** for actual performance (not missing stuff)
• Includes performance only on assessments, not homework
• Uses equal grade bands, e.g., a minimum grade of 50 or 4/3/2/1/0 or good/okay/marginal/poor, mastered/not-mastered or rubric-based results or . . .
• Allows counting more recent/later assessments or reassessments
IMPLICATIONS

• Substantial work in initial planning of outcomes, learning activities, and (perhaps multiple versions of) assessments—soft-skills may be outcomes, they need their own assessments
• Assessments for individuals in group work will need to be developed. Soft-skill assessments have need to be developed.
• Reimagining the provision of feedback to students, perhaps redefining “teaching” activity
• Less time spent grading
• No more arguing about points and students focus on learning content
• (ultimately) Happier students
DISCUSSION

• Our thinking about grading has changed dramatically. For us it is unprofessional not to use these practices. Fortunately, we also think our instruction becomes better as a result.

• Wonderings, arguments, questions, . . .