Grading and Assessment: Who Cares?

University of North Florida

Office of Faculty Enhancement

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Why are we here?

- Discuss defensible grading practices.
- Delineate key philosophical issues.
- Outline steps to instituting a grading plan.
- Debate!

Purpose of Grades

- Why do we use GRADES?
- Grades intended to communicate achievement status.
- Achievement status:
  - Important instructional goals.
  - Symbolize extent to which student attained goals.
- Grades serve secondary functions too.
  - e.g., Incentives to learn.

Grades

- How should we grade?
- First.
  - Develop grading philosophy.
- Second.
  - Create grading plan.
- Third.
  - Assign grades.

Grades

- At each step…
- Examine fairness and defensibility.

Today's Objectives

- Discuss questions of value to consider.
  - Formulating philosophy.
- Describe example procedural grading plan.
- Examine how symbol definitions influence grading decisions.
- Debate strengths and weaknesses.

ESTABLISHING A PHILOSOPHY

Grading As A Philosophy

- Process of grading requires decisions grounded in value system.
  - Less matter of correctness.
  - More matter of preference and perceived value or importance.
- Several "should" questions.
- Elements ideally considered a priori.
  - Before teaching.
  - Before evaluating.
  - Before assigning.

Symbol Meaning

- What meaning should each grade symbol carry?
  - Total knowledge?
  - Relative standing?
  - Effort?
  - Growth in learning?
- Cannot tell all things at once.
- What should it tell?

Meaning of Failure

- What should "failure" mean?
  - Lack of knowledge?
  - Least knowledge within class?
  - Unable to meet lowest level of work in the curriculum?
  - No effort?
  - Hasn't tried to learn?
  - Hasn't learned much in semester?

Performance Elements

- Which performance elements should grade incorporate?
- Grade need not include all gathered information.
- What should it include?
- What should it exclude?

Grade Distribution

- How should grades be distributed?
- Should the average grade be C?
- What if all students receive an A?

Final Grade

- What should the final grade include?
- Separate "earlier" grades should reflect final symbol, but...
  - Should rough drafts count?
  - Should we "adjust" difficult (for the entire class) test scores?
  - Should practice trials count?
- Must there be a minimum combination?

Combining Components

- How should we combine components?
- Should each component be proportional?
- What do we think about when making that decision?
- Or do we?

Assigning Grades

- Which available method should we use?
- Need for consistency with grading philosophy.
- What issues do each of the methods raise?
- Class “vs.” Individual issues.

Borderline Cases

- Should borderline see review?
- What determines borderline status?
  - How close to cut-point?
- What about grades just above the cut-point?
- What additional information should we examine to make the decision?
  - Should we allow extra credit?
  - How?
  - When?

ESTABLISHING A GRADING PLAN

Decide Upon Grade Symbol's Meaning

- Relative vs. Absolute Standards.
- Relative, norm-referenced standard.
  - C would mean average performance in the class.
- Absolute, criterion-referenced standard.
  - C would reflect attainment of specific, distribution independent objectives.
  - Criterion-references need learning outcomes descriptions for definition.

Decide Upon Grade Symbol's Meaning

- Following table gives potential phrases used to differentiate absolute performance levels.
  - (Frisbie & Waltman, 1992).

- Includes relative grade descriptors.

Decide Upon Grade Symbol's Meaning

Grade	Absolute Scale, Criterion-referenced	Relative Scale, Norm-referenced
A	Firm command of knowledge domain •High level of skill development •Exceptional preparation for later learning	Far above class average
B	Command of knowledge beyond minimum •Advanced development of most skills •Has prerequisites for later learning	Above class average
C	Command of only the basic concepts of knowledge •Demonstrated ability to use basic skills •Lacks a few prerequisites for later learning	At the class average
D	Lacks knowledge of some fundamental ideas •Some important skills not attained •Deficient in many of the prerequisites for later learning	Below class average
F	Most of the basic concepts and principles not learned •Most essential skills cannot be demonstrated •Lacks most prerequisites needed for later learning	Far below class average

Decide Upon Grade Symbol's Meaning

- Absolute standards do not reference other students' achievements.

- Grade based on:
  - Knowledge.
  - Skills studied.
  - Attainment of prerequisites for future learning.

Decide Upon Grade Symbol's Meaning

- Conscious selection of relative or absolute grading standard is critical.

- Once we make that choice, assessment tools used to obtain grading information should reflect that selection.

Achievement Vs. Effort

- Achievement vs. effort.
- Effort and achievement not independent.
- Single grade cannot describe both unambiguously.

Time Components

- Growth vs. status.
- If a grade indicates growth, highest grades should reflect the most growth.
  - The greatest gains.
  - High beginning achievement levels allow least growth.
  - Assigning a poor grade to this situation runs counter to general notion of a grade.

Time Components

- On the other hand, we generally care whether growth occurs.

- What time point does grade reflect?
  - When should the clock started?
  - How sensitive should the change increments be?

Confounding Grading Components

- We may distort meaning and value of grading components.

- Appear relevant, but not.
  - Writing deficiencies vs. achievement deficiencies.
  - Group vs. individual work.
  - Late penalties.
  - Absences.

Confounding Grading Components

- Tie grading and components to instruction goals.
- Tainted component scores cause tainted composites.
- Tainted composites lead to misinterpretation.

Define Number Of Needed Components

- How many components will you use?
  - Single test?
  - Two tests sufficient?

- More good, available information leads to more accurate achievement reflection.

Define Number Of Needed Components

- Overriding concern/guideline:
- Assess attainment on all instructional objectives.
- Combined grade represents accomplishment across domains.
- Requires operationally defining instructional objectives.

Define Number Of Needed Components

- Learning status (practice) vs. achievement.
- Operationally define the difference.
- Should we include information that helps us teach better in the final grade?
- Preferably not.
  - If grade intended to reflect achievement at specific time point.
- Tainted composites lead to misinterpretation.

Determine Each Component's Weight

- How important is a given component?
- Again, we need well defined, specific instructional objectives.

Establish Combination Method

- Proper weighting differs for norm- and criterion-referenced situations.

Choose Assignment Method

- Many commonly used methods fail to be either norm- or criterion-referenced.
- Borderline Cases.
  - Should we deal with them?
  - If so, how?
- Inherent subjectivity in grading.
- Measurement error.

Choose Assignment Method

- What basis should decide whether to raise or lower a grade?
- Achievement information not used to assign tentative final grade should form basis of consideration.
- Grade should describe achievement rather than effort.
  - Unless effort included in instructional goals.

Relative Grading

- Grades derived from relative grading methods will have shortcomings.
- Without reference group knowledge, interpretation difficult.
- By definition, does not express student's ability.
- No content basis.

Relative Grading

- Curve Method
  - Class grades defined to follow a specific distribution.
  - Generally normal.
- Distribution Gap Method
  - Find distribution gaps.
  - Draw cutoffs at those places.
- Standard Deviation Method
  - Uses standard deviation like a ruler to identify grade cutoff points.

Absolute Grading Methods

- Share shortcomings too.
- Without performance description, meaning obscure.
- Not strictly absolute in meaning.
- Grades based on performance standards with normative basis.
- However, adjusting grades vs. modifying standards differs.

Absolute Grading Methods

- Fixed Percent Scale.
- Total Point Method.

- Both.
  - Cannot provide reference to absolute performance unless knowledge domain described.
  - Meaning of percentile decision?
  - Influence of extra credit?

- Content-Based Method
  - Assign grade to each component and then weight separate grades to obtain final one.

Subjectivity

- All grading methods involve subjectivity.
- Should you use criterion systems?
  - Good teachers might disagree.
- What is B achievement like and how is it different from C achievement?
  - Good teachers might disagree.

Subjectivity

- Explicit philosophies, definitions, and plans lead to more defensible practices.

Reference

Adapted from:

Frisbie, D. A., & Waltman, K. K. (1992). NCME Instructional Module: Developing a Personal Grading Plan.

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