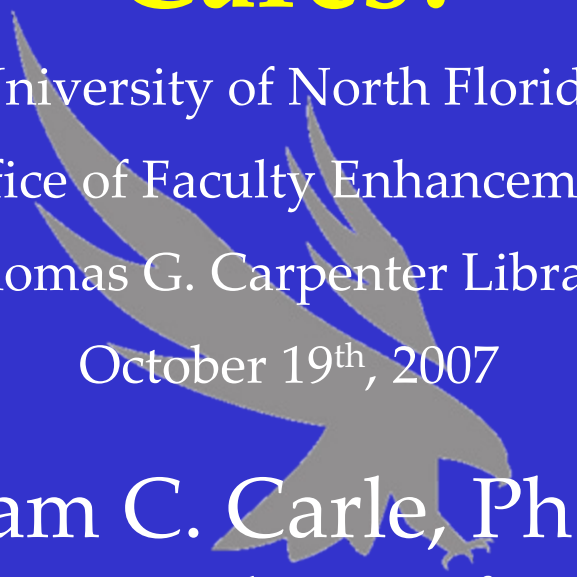


Grading and Assessment: Who Cares?

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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 <ul style="list-style-type: none">•High level of skill development•Exceptional preparation for later learning	Far above class average
B	Command of knowledge beyond minimum <ul style="list-style-type: none">•Advanced development of most skills•Has prerequisites for later learning	Above class average
C	Command of only the basic concepts of knowledge <ul style="list-style-type: none">•Demonstrated ability to use basic skills•Lacks a few prerequisites for later learning	At the class average
D	Lacks knowledge of some fundamental ideas <ul style="list-style-type: none">•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 <ul style="list-style-type: none">•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.

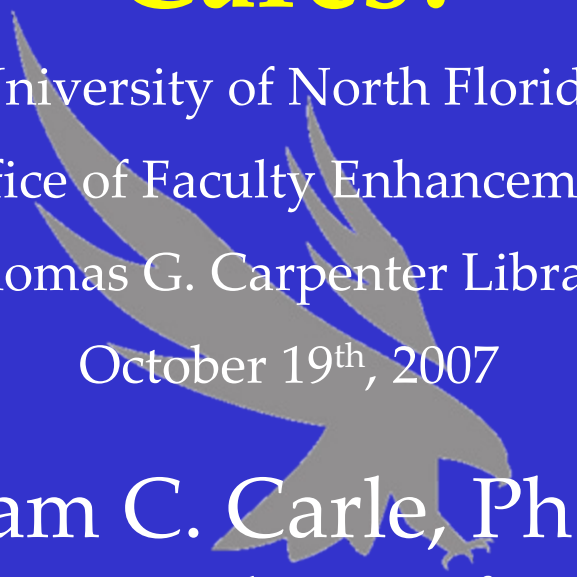
Reference

Adapted from:

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

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