

Grading and Reporting Student Learning

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Dr. Guskey is Professor of Educational Psychology in the College of Education at the University of Kentucky, and widely known for his research in education reform, assessment, grading practices, and mastery learning. A graduate of the University of Chicago, he has taught at all levels, served as an administrator in Chicago Public Schools, and was the first Director of the *Center for the Improvement of Teaching and Learning*, a national educational research center. His books have won numerous awards and his articles have appeared in prominent research journals as well as *Educational Leadership*, *Kappan*, and *School Administrator*. He served on the Policy Research Team of the *National Commission on Teaching & America's Future*, on the Task Force to develop the *National Standards for Staff Development*, and recently was honored by the American Educational Research Association for his work relating research to practice. He co-edits the *Experts in Assessment Series* for Corwin Press and was featured on the National Public Radio program, "Talk of the Nation." As a consultant to schools and education agencies throughout North America and around the world, he helps bring clarity and insight to some of education's most complex problems.

Publications on Grading and Reporting

Developing Standards-Based Report Cards

(with J. Bailey). Thousand Oaks, CA: Corwin, 2010.

Practical Solutions for Serious Problems in Standards-Based Grading. Thousand Oaks, CA: Corwin, 2009.

How's My Kid Doing? A Parents' Guide to Grades, Marks, and Report Cards. San Francisco: Jossey Bass, 2002.

Developing Grading and Reporting Systems for Student Learning (with J. Bailey). Thousand Oaks, CA: Corwin, 2001.

Implementing Student-Led Conferences.

(with J. Bailey). Thousand Oaks, CA: Corwin, 2001.

Communicating Student Learning. Alexandria, VA: Association for Supervision and Curricular Development, 1996.

Presentation Digest XI: Developing Grading and Reporting Systems for Student Learning. (with Bailey). Alexandria, VA: Association for Supervision and Curriculum Development, 2003.

Grading and Reporting Student Learning – Professional Development Inquiry Kit. (with Marzano). Alexandria, VA: Association for Supervision and Curriculum Development, 2002.

"Grading and Reporting in a Standards-Based Environment: Implications for Students with Special Needs (with L. Jung). *Theory Into Practice*, 2009, 48(1), 53-62.

"Grading Policies and Standards-Based Reforms: Conflicts and Solutions." In S. Mathison & E. W. Ross (Eds.), *Battleground Schools: An Encyclopedia of Conflict and Controversy*. Westport, CT: Greenwood, 2007.

"Standards-Based Grading and Reporting: A Model for Special Education (with L. Jung). *Teaching Exceptional Children*, 2007, 40(2), 48-53.

"Efficacy of Online Reporting". *Alberta Assessment Consortium Communiqué*, p. 2. Also available at: <http://www.aac.ab.ca/freenews.html>

"'It Wasn't Fair!' Educators' Recollections of Their Experiences as Students with Grading. *Journal of Educational Research and Policy Studies*, 2006, 6(2), 111-124.

"Making High School Grades Meaningful." *Phi Delta Kappan*, 2006, 87(9), 670-675.

"The Problem of Grade Inflation." *Principal Matters*, 2006, 66, 38-40.

"The Challenges of Standards-Based Grading" (with L. Jung). *Leadership Compass*, 2006, 4(2), 1-5.

"Mapping the Road to Proficiency." *Educational Leadership*, 2005, 63(3), 32-38.

"A Historical Perspective on Closing Achievement Gaps." *NASSP Bulletin*, 2005, 89(64), 76-89.

"The Communication Challenge of Standards-Based Reporting." *Phi Delta Kappan*, 2004, 86(4), 326-329.

"Zero Alternatives." *Principal Leadership*, 2004, 5(2) 49-53.

"How Classroom Assessments Improve Learning." *Educational Leadership*, 2003, 60(5) 6-11

"Computerized Gradebooks and the Myth of Objectivity." *Phi Delta Kappan*, 2002, 83(10), 775-780.

"Grading Practices in Schools." In J. W. Guthrie (Ed.), *Encyclopedia of Education* (2nd ed.). New York: Macmillan, 2002.

"Helping Standards Make the Grade." *Educational Leadership*, 2001, 59(1), 20-27.

"High Percentages are Not the Same as High Standards." *Phi Delta Kappan*, 2001, 82(7), 534-538.

"Grading Policies that Work Against Standards ... and How to Fix Them." *NASSP Bulletin*, 2000, 84(620), 20-29.

"Making Standards Work." *The School Administrator*, 1999, 56(9), 44.

"Making the Grade: What Benefits Students?" *Educational Leadership*, 1994, 52(2), 14-20.

Practical Solutions for Serious Problems in Standards-Based Grading

Edited by Thomas R. Guskey

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- Address how teachers can assign fair and accurate grades to English language learners and students with special needs
- Examine legal issues related to grading
- Discuss why report card grades and large-scale assessment scores may vary
- Offer communication strategies with parents

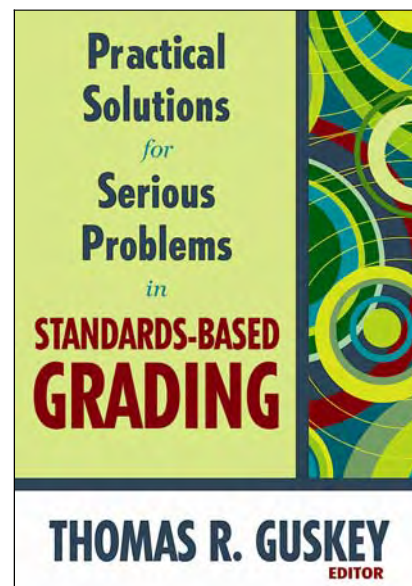
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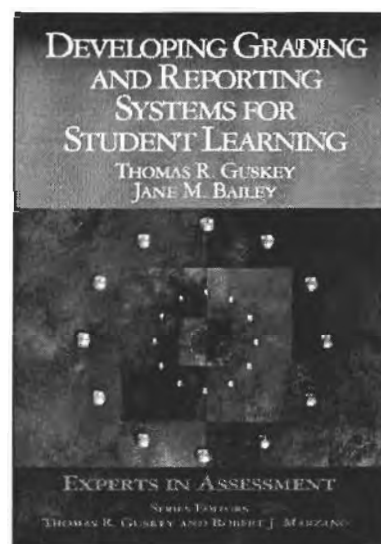
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Thomas R. Guskey, Jane M. Bailey

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- Good reporting is based on good evidence
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HOW'S MY KID DOING?

A PARENT'S GUIDE TO GRADES, MARKS, AND REPORT CARDS



THOMAS R. GUSKEY

How's My Kid Doing?

A Parent's Guide to Grades, Marks, & Report Cards

By

Thomas R. Guskey

Over the years, Tom Guskey is the teacher from whom I have learned the most about the principles of effective communication. He has consistently analyzed and articulated our communication options with immense clarity. He's done it again, this time for parents.

**-Rick Stiggins, President
Assessment Training Institute, Oregon**

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Most parents want schools to provide honest, clear, and explicit information on how their child is doing – with specific suggestions for improvement. Unfortunately, most schools are providing “progress reports” that parents find vague, confusing, inconsistent, and delivered in unfamiliar formats. *How's My Kid Doing* helps parents make sense of their child's grades, test scores, and report cards by explaining the advantages and shortcoming of different reporting methods. It answers parents' most frequently asked questions about plus and minus grades, grading on the curve, standards, and narrative evaluations. And, it offers strategies for working with teachers and with children to improve the system. Most important, it illustrates how educators and parents can become true partners in a child's learning.

ABOUT THE AUTHOR:

THOMAS R. GUSKEY is professor of education at the University of Kentucky, Lexington. He is a frequent speaker at national education conferences, and a leading expert on the topics of grading, assessment, and professional development in education.

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***Questionnaires
and
Activities***

Grading Formulae: What Grade Do Students Deserve?

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The table below shows the performance of seven students over five instructional units. Also shown are the summary scores and grades for these students calculated by three different methods: (1) the simple arithmetic average of unit scores, (2) the median or middle score from the five units, and (3) the arithmetic average, deleting the lowest unit score in the group.

Consider, too, the following explanations for these score patterns:

Student 1 struggled in the early part of the marking period but continued to work hard, improved in each unit, and did excellently in unit 5.

Student 2 began with excellent performance in unit 1 but then lost motivation, declined steadily during the marking period, and received a failing mark for unit 5.

Student 3 performed steadily throughout the marking period, receiving three *B*'s and two *C*'s, all near the *B* – *C* cut-score.

Student 4 began the marking period poorly, failing the first two units, but with newfound interest performed excellently in units 3, 4, and 5.

Student 5 began the marking period excellently, but then lost interest and failed the last two units.

Student 6 skipped school (unexcused absence) during the first unit, but performed excellently in every other unit.

Student 7 performed excellently in the first four units, but was caught cheating on the assessment for unit 5, resulting in a score of zero for that unit.

Summary Grades Tallied by Three Different Methods

Student	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Average Score	Grade	Median Score	Grade	Deleting Lowest	Grade
1	59	69	79	89	99	79.0	C	79.0	C	84.0	B
2	99	89	79	69	59	79.0	C	79.0	C	84.0	B
3	77	80	80	78	80	79.0	C	80.0	B	79.5	C
4	49	49	98	99	100	79.0	C	98.0	A	86.5	B
5	100	99	98	49	49	79.0	C	98.0	A	86.5	B
6	0	98	98	99	100	79.0	C	98.0	A	98.8	A
7	100	99	98	98	0	79.0	C	98.0	A	98.8	A

Grading standards: 90% – 100% = A
 80% – 89% = B
 70% – 79% = C
 60% – 69% = D
 – 59% = F

Questions: Which grading method is best? Which is fairest?

What grade does each student deserve?

GRADING AND REPORTING STUDENT LEARNING

From: **Guskey, T. R., & Bailey, J. M. (2001). *Developing Grading and Reporting Systems for Student Learning*. Thousand Oaks, CA: Corwin Press.**

Guskey, T. R. (2002). *How's My Kid Doing: A Parent's Guide to Grades, Marks, & Report Cards*. San Francisco, CA: Jossey-Bass.

General Conclusions From the Research:

1. Grading and reporting are *not* essential to the instructional process.
2. Grading and reporting serve a variety of purposes, but no one method serves all purposes well.
3. Grading and reporting will always involve some degree of subjectivity.
4. Mathematic precision does *not* yield fairer or more objective grading.
5. Grades have some value as a reward, but no value as a punishment.
6. Grading and reporting should always be done in reference to learning criteria, never "on the curve."
7. Three general types of learning criteria are used in grading and reporting:
 - a. *Product* criteria
 - b. *Process* criteria
 - c. *Progress* criteria
8. Report cards are but *one way* to communicate with parents.

Guidelines for Better Practice:

1. Begin with a clear statement of purpose and specific learning goals.
 - a. Why are grading and reporting done?
 - b. For whom is the information intended?
 - c. What are the desired results?
2. Ensure that grading and reporting methods provide accurate and understandable descriptions students learning.
 - a. *More* a challenge in clear thinking and effective communication
 - b. *Less* an exercise in quantifying achievement
3. Use grading and reporting methods to enhance teaching and learning.
 - a. Facilitate communication between teachers, students, parents, and others.
 - b. Ensure that efforts to help students are consistent and harmonious
4. Alleviate questionable practices:
 - a. Example 1: Averaging to obtain a student's grade or mark.
 - b. Example 2: Assigning a 'zero' to work that is late, missed, or neglected.
 - c. Example 3: Taking credit away from students for behavioral infractions.

For additional information contact:

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Grading and Reporting Student Learning

Thomas R. Guskey

Grading and Reporting Questionnaire

Guiding Questions

1. What are the major reasons we use report cards and assign grades to students' work?
2. Ideally, what purposes should report cards or grades serve?
3. What elements should teachers use in determining students' grades?
(For example, major assessments, compositions, homework, attendance, class participation, etc.)

Purposes of Grading

1. Communicate the Achievement Status of Students to Their Parents and Others
2. Provide Information for Student Self-Evaluation
3. Select, Identify, or Group Students for Certain Educational Programs
4. Provide Incentives for Students to Learn
5. Document Students' Performance to Evaluate the Effectiveness of Instructional Programs
6. Provide Evidence of Students' Lack of Effort or Inappropriate Responsibility

Grading Elements

- | | |
|-----------------------------------|------------------------------|
| ✓ Major Exams or Compositions | ✓ Homework Completion |
| ✓ Class Quizzes | ✓ Homework Quality |
| ✓ Reports or Projects | ✓ Class Participation |
| ✓ Student Portfolios | ✓ Work Habits and Neatness |
| ✓ Exhibits of Students' Work | ✓ Effort Put Forth |
| ✓ Laboratory Projects | ✓ Class Attendance |
| ✓ Students' Notebooks or Journals | ✓ Punctuality of Assignments |
| ✓ Classroom Observations | ✓ Class Behavior or Attitude |
| ✓ Oral Presentations | ✓ Progress Made |

General Conclusions from the Research on Grading

#1 Grading and Reporting are *NOT* Essential to the Instructional Process

- ✓ Teachers can teach without grades.
- ✓ Students can and do learn without grades.

Checking *is* Essential !

- ➔ Checking is Diagnostic
 - Teacher is an *Advocate*
- ➔ Grading is Evaluative
 - Teacher is a *Judge*

#2 No One Method of Grading and Reporting Serves *All* Purposes Well !

Purposes of Grading

1. Communicate the Achievement Status of Students to Their Parents and Others
2. Provide Information for Student Self-Evaluation
3. Select, Identify, or Group Students for Certain Educational Programs
4. Provide Incentives for Students to Learn
5. Document Students' Performance to Evaluate the Effectiveness of Instructional Programs
6. Provide Evidence of Students' Lack of Effort or Inappropriate Responsibility

Architecture:

Form *Follows* Function.

Education:

Method *Follows* Purpose!

Solution:

Multiple Purposes Require a

***Multi-Faceted,
Comprehensive
Reporting System!***

Letter Grades

- ➔ **Advantages:**
 1. Brief Description of Adequacy
 2. Generally Understood
- ➔ **Disadvantages:**
 1. Require the Abstraction of Lots of Information
 2. Cut-offs are Arbitrary
 3. Easily Misinterpreted

Percentage Grades

- ➔ **Advantages:**
 1. Provide Finer Discriminations
 2. Increase Variation in Grades
- ➔ **Disadvantages:**
 1. Require the Abstraction of Lots of Information
 2. Increased Number of Arbitrary Cut-offs
 3. Greater Influence of Subjectivity

Standards-Based (Checklist of Skills)

- ➔ **Advantages:**
 1. Clear Description of Achievement
 2. Useful for Diagnosis and Prescription
- ➔ **Disadvantages:**
 1. Often Too Complicated for Parents to Understand
 2. Seldom Communicate the Appropriateness of Progress

Steps in Developing Standards-Based Grading

1. **Identify the major learning goals or standards** that students will be expected to achieve at each grade level or in each course of study.
2. **Establish performance indicators** for the learning goals or standards.
3. **Determine graduated levels of performance** (benchmarks) for assessing each goal or standard.
4. **Develop reporting forms** that communicate teachers' judgments of students' learning progress and culminating achievement in relation to the learning goals or standards.

Challenges In Determining Graduated Levels of Student Performance

1. **Levels of Understanding / Quality**

Modest	Beginning	Novice	Unsatisfactory
Intermediate	Progressing	Apprentice	Needs Improvement
Proficient	Adequate	Proficient	Satisfactory
Superior	Exemplary	Distinguished	Outstanding
2. **Level of Mastery / Proficiency**

Below Basic	Below Standard	Pre-Emergent	Incomplete
Basic	Approaching Standard	Emerging	Limited
Proficient	Meets Standard	Acquiring	Partial
Advanced	Exceeds Standard	Extending	Thorough
3. **Frequency of Display**

Rarely	Never
Occasionally	Seldom
Frequently	Usually
Consistently	Always
4. **Degree of Effectiveness**

Ineffective	Poor
Moderately Effective	Acceptable
Highly Effective	Excellent
5. **Evidence of Accomplishment**

Little or No Evidence
Partial Evidence
Sufficient Evidence
Extensive Evidence

Narratives

- ➔ **Advantages:**
 1. Clear Description of Progress and Achievement
 2. Useful for Diagnosis and Prescription
- ➔ **Disadvantages:**
 1. Extremely Time-Consuming for Teachers to Develop
 2. May Not Communicate Appropriateness of Progress
 3. Comments Often Become Standardized

**Methods can be
Combined to
Enhance their
Communicative
Value !**

***Grades with Comments are
Better than Grades Alone!***

Grade	Standard Comment
A	Excellent ! Keep it up.
B	Good work. Keep at it.
C	Perhaps try to do still better?
D	Let's bring this up.
F	Let's raise this grade !

From: Page, E. B. (1958). Teacher comments and student performance:
A seventy-four classroom experiment in school motivation.
Journal of Educational Psychology, 49, 173-181.

Solution:

- 1. Determine the Primary Purpose of each Grading and Reporting Tool.**
- 2. Select or Develop the Most Appropriate Method for Each Tool.**
- 3. Develop a *Multi-Faceted, Comprehensive Reporting System!***

**#3 Grading and
Reporting Will
Always Involve
Some Degree of
*Subjectivity !***

**In General,
Reporting is *More*
Subjective:**

- ✓ The More *Detailed* the Reporting Method.
- ✓ The More *Analytic* the Reporting Process.
- ✓ The More '*Effort*' is Considered.
- ✓ The More '*Behavior*' Influences Judgments.

**However, More
Detailed and *Analytic*
Reports are Better
*Learning Tools !***

Challenge:

To Balance Reporting Needs with Instructional Purposes

#4 Mathematic Precision Does *NOT* Yield *Fairer* or *More Objective* Grading!

Student Achievement Profiles:

Student 1 struggled in the early part of the marking period but continued to work hard, improved in each unit, and did excellently in unit 5.

Student 2 began with excellent performance in unit 1 but then lost motivation, declined steadily during the marking period, and received a failing mark for unit 5.

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Grading Formulae

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2	99	89	79	69	59	79.0	C	79.0	C	84.0	B
3	77	80	80	78	80	79.0	C	80.0	B	79.5	C
4	49	49	98	99	100	79.0	C	98.0	A	86.5	B
5	100	99	98	49	49	79.0	C	98.0	A	86.5	B
6	0	98	98	99	100	79.0	C	98.0	A	98.8	A
7	100	99	98	98	0	79.0	C	98.0	A	98.8	A

Questionable Practices:

- ✓ Averaging to Obtain a Course Grade
- ✓ Giving Zeros for Work Missed or Work Turned in Late
- ✓ Taking Credit Away from Students For Infractions

Alternatives to Averaging Inconsistent Evidence on Student Learning:

- ✓ Give priority to the most recent evidence.
- ✓ Give priority to the most comprehensive evidence.
- ✓ Give priority to evidence related to the most important learning goals or standards.

Alternatives to Giving Zeros :

- ✓ **Assign “I” or “Incomplete” Grades.**
Include specific and immediate consequences.
- ✓ **Report Behavioral Aspects Separately.**
Separate “Product” (Achievement) from “Process” and “Progress.”
- ✓ **Change Grading Scales.**
Use Integers (A=4, B=3, C=2, ...) instead of Percentages.

**Grading requires
*Thoughtful and
Informed
Professional Judgment!***

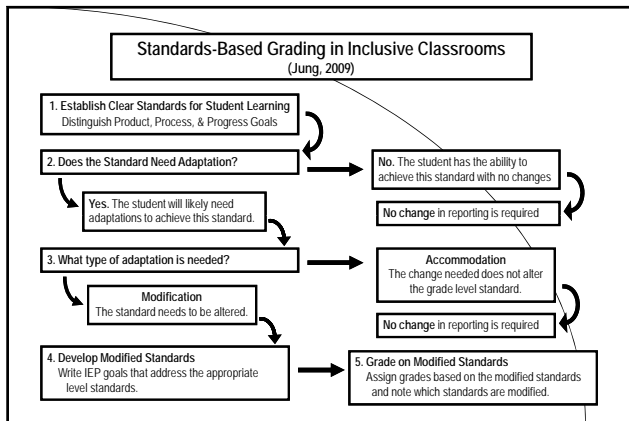
**#5 Grades have Some
Value as *Rewards*,
but *NO* Value as
*Punishments !***

Message:
**Do Not Use Grades
as *Weapons !***

**#6 Grading and Reporting
should *Always* be done
in reference to
Learning Criteria,
Never “On The Curve”**

Grading Criteria

- 1. *Product* Criteria**
- 2. *Process* Criteria**
- 3. *Progress* Criteria**



#7 Grade Distributions Reflect *Both*:

- ✓ 1. Students' Level of Performance
- ✓ 2. The Quality of the Teaching

#8 Report Cards are but *One Way* of Communicating with Parents !

Forms of Reporting to Parents Include:

- | | |
|-------------------------------------|-------------------------------------|
| ✓ Report Cards | ✓ Personal Letters |
| ✓ Notes with Report Cards | ✓ Homework |
| ✓ Standardized Assessment Reports | ✓ Evaluated Assignments or Projects |
| ✓ Weekly / Monthly Progress Reports | ✓ Portfolios or Exhibits |
| ✓ Phone Calls | ✓ School Web Pages |
| ✓ School Open Houses | ✓ Homework Hotlines |
| ✓ Newsletters | ✓ Parent-Teacher Conferences |
| | ✓ Student-Led Conferences |

In Reporting to Parents:

1. Include *Positive Comments*.
2. Describe *Specific Learning Goals or Expectations* (Include Samples of the Student's Work).
3. Provide *Specific Suggestions* on What Parents Can Do To Help.
4. Stress *Parents' Role as Partners* in the Learning Process.

#9 High Percentages are *NOT* the same as High Standards!

Guidelines for *Better* Practice

#1 Begin with a *Clear Statement of Purpose*

- ✓ Why Grading and Reporting Are Done?
- ✓ For Whom the Information is Intended?
- ✓ What are the Desired Results?

#2 Provide *Accurate* and *Understandable* Descriptions of Student Learning

- ✓ *More* a Challenge in Effective Communication
- ✓ *Less* an Exercise in Quantifying Achievement

#3 Use Grading and Reporting to *Enhance* Teaching and Learning

- ✓ Facilitate Communication Between Teachers, Parents, and Students
- ✓ Ensure Efforts to Help Students are Harmonious

An Important Distinction:

***Managers* know how
to do things right.**

***Leaders* know
the right things to do!**

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Readings

Educational Leadership

September 2001 | Volume 59 | Number 1

Making Standards Work Pages 20-27

Helping Standards Make the Grade

Thomas R. Guskey

When reporting on student work, educators need a clear, comprehensive grading system that shows how students are measuring up to standards.



September 2001

The issue of grading looms on the horizon for standards-based education. With standards and assessments now in place, educators face the daunting task of how best to grade and report student learning in terms of those standards. Most educators recognize the inadequacies of their current grading and reporting methods (Marzano, 2000). Few, however, have found alternatives that satisfy the diverse needs of students, parents, teachers, school administrators, and community members.

Standards don't lessen the responsibility of educators to evaluate the performance of students and to report the results. Nevertheless, the focus on standards poses unique challenges in grading and reporting. What are those challenges, and how can educators develop standards-based grading and reports that are accurate, honest, and fair?

Criterion-Referenced Standards

The first challenge is moving from norm-referenced to criterion-referenced grading standards. *Norm-referenced* standards compare each student's performance to that of other students in the group or class. Teachers first rank students on some measure of their achievement or performance. They assign a set percentage of top-ranked students (usually 10 to 20 percent) the highest grade, a second set percentage (perhaps 20 to 30 percent) the second highest grade, and so on. The percentages typically correspond to an approximation of the bell-shaped, normal probability curve, hence the expression "grading on the curve." Most adults experienced this type of grading during their school days.

Criterion-referenced standards, in contrast, compare each student's performance to clearly stated performance descriptions that differentiate levels of quality. Teachers judge students' performance by what each student does, regardless of how well or poorly their classmates perform.

Using the normal probability curve as a basis for assigning grades yields highly consistent grade distributions from one teacher to the next. All teachers' classes have essentially the same percentages of *As*, *Bs*, and *Cs*. But the consequences for students are overwhelmingly negative. Learning becomes highly competitive because students must compete against one another for the few high grades that the teacher distributes. Under these conditions, students see that helping others threatens their own chances for success. Because students do not achieve high grades by performing well, but rather by doing better than their classmates, learning becomes a game of winners and losers, and because teachers keep the number of rewards arbitrarily small, most students must be losers (Haladyna, 1999; Johnson & Johnson, 1989). Strong evidence shows that "grading on the

curve" is detrimental to relationships—both among students and among teachers and students (Krumboltz & Yeh, 1996).

In a standards-based system, grading and reporting must be criterion-referenced. Teachers at all levels must identify what they want their students to learn and be able to do and what evidence they will use to judge that achievement or performance. Grades based on clearly stated learning criteria have direct meaning and communicate that meaning.

Differentiating Grading Criteria

A second challenge is to differentiate the types of grading criteria that teachers will use. Although teachers and students generally consider criterion-referenced grading to be more fair and equitable (Kovas, 1993), the specific grading criteria that teachers use may be very diverse. We can classify these criteria into three broad categories: *product*, *process*, and *progress* (Guskey, 1996).

Product criteria relate to students' specific achievements or levels of performance. They describe what students know and are able to do at a particular point in time. Advocates of standards generally favor product criteria. Teachers using product criteria base students' grades or reports exclusively on final examination scores; final products, such as reports, projects, or portfolios; overall assessments of performance; and other culminating demonstrations of learning.

Process criteria relate not to the final results, but to how students got there. Educators who believe that product criteria do not provide a complete picture of student learning generally favor process criteria. For example, teachers who consider student effort, class behavior, or work habits are using process criteria. So are those who count daily work, regular classroom quizzes, homework, class participation, punctuality of assignments, or attendance in determining students' grades.

Progress criteria relate to how much students actually gain from their learning experiences. Other terms include learning gain, improvement grading, value-added grading, and educational growth. Teachers who use progress criteria typically look at how far students have come rather than where students are. Others attempt to judge students' progress in terms of their "learning potential." As a result, progress grading criteria are often highly individualized among students.

Because they are concerned about student motivation, self-esteem, and the social consequences of grading, few teachers today use product criteria solely in determining grades. Instead, most base their grading on some combination of criteria, especially when a student receives only a single grade in a subject area (Brookhart, 1993; Frary, Cross, & Weber, 1993). The majority of teachers also vary the criteria they use from student to student, taking into account individual circumstances (Truog & Friedman, 1996). Although teachers do so in an effort to be fair, the result is often a hodgepodge grade that includes elements of achievement, effort, and improvement (Brookhart, 1991).

Interpreting the grade or report thus becomes difficult for parents, administrators, community members, and even the students (Friedman & Frisbie, 1995). An A, for example, may mean that the student knew what the teacher expected before instruction began (product), didn't learn as well as expected but tried very hard (process), or simply made significant improvement (progress).

Measurement experts generally recommend using product criteria exclusively in determining students' grades. They point out that the more process and progress criteria come into play, the more subjective and biased grades are likely to be (O'Connor, 1999; Ornstein, 1994). How can a teacher know, for example, how difficult a task was for students or how hard they worked to complete it?

Many teachers, however, point out that if they use product criteria exclusively, some high-ability students receive high grades with little effort, whereas the hard work of less-talented students is seldom acknowledged. Others say that if teachers consider only product criteria, low-ability students and those who are disadvantaged—students who must work the hardest—have the least incentive to

do so. These students find the relationship between high effort and low grades unacceptable and, as a result, often express their displeasure with indifference, deception, or disruption (Tomlinson, 1992).

A practical solution to this problem, and one that increasing numbers of teachers and schools are using, is to establish clear indicators of product, process, and progress, and then to report each separately (Stiggins, 2001; Wiggins, 1996). Teachers separate grades or marks for learning skills, effort, work habits, or progress from grades for achievement and performance. Parents generally prefer this approach because it gives them more detailed and prescriptive information. It also simplifies reporting for teachers because they no longer have to combine so many diverse types of information into a single grade. The key to success, however, rests in the clear specification of those indicators and the criteria to which they relate. This means that teachers must describe how they plan to evaluate students' achievement, effort, work habits, and progress, and then must communicate these plans directly to students, parents, and others.

Reporting Tools

A third challenge for standards-based education is clarifying the purpose of each reporting tool. Although report cards are the primary method, most schools today use a variety of reporting devices: weekly or monthly progress reports, open-house meetings, newsletters, evaluated projects or assignments, school Web pages, parent-teacher conferences, and student-led conferences (Guskey & Bailey, 2001). Each reporting tool must fulfill a specific purpose, which requires considering three vital aspects of communication:

- What information do we want to communicate?
- Who is the primary audience for that information?
- How would we like that information to be used?

Many educators make the mistake of choosing their reporting tools first, without giving careful attention to the purpose. For example, some charge headlong into developing a standards-based report card without first addressing core questions about why they are doing it. Their efforts often encounter unexpected resistance and rarely bring positive results. Both parents and teachers perceive the change as a newfangled fad that presents no real advantage over traditional reporting methods. As a result, the majority of these efforts become short-lived experiments and are abandoned after a few troubled years of implementation.

Efforts that begin by clarifying the purpose, however, make intentions clear from the start. If, for instance, the purpose of the report card is to communicate to parents the achievement status of students, then parents must understand the information on the report card and know how to use it. This means that educators should include parents on report card committees and give their input careful consideration. This not only helps mobilize everyone in the reporting process, it also keeps efforts on track. The famous adage that guides architecture also applies to grading and reporting: *Form follows function*. Once the purpose or function is clear, teachers can address more easily questions regarding form or method (Guskey & Bailey, 2001).

Developing a Reporting Form

The fourth challenge for standards-based education is developing the centerpiece of a standards-based reporting system: the report card. This typically involves a four-step process. First, teams of educators identify the major learning goals or standards that students are expected to achieve at each grade level or course of study. Second, educators establish performance indicators for those learning goals or standards. In other words, educators decide what evidence best illustrates students' attainment of each goal or standard. Third, they determine graduated levels of quality for assessing student performance. This step involves identifying incremental levels of attainment, sometimes

referred to as benchmarks, as students progress toward the learning goals or standards (Andrade, 2000; Wiggins & McTighe, 1998). Finally, educators, often in collaboration with parents, develop a reporting form that communicates teachers' judgments of students' progress and achievement in relation to the learning goals or standards.

Identifying Reporting Standards

Identifying the specific learning goals or standards on which to base grades is probably the most important, but also the most challenging, aspect of standards-based grading. These learning goals or standards should stipulate precisely what students should know and be able to do as a result of their learning experiences. In earlier times, we might have referred to cognitive skills, learning competencies, or performance outcomes (Guskey, 1999). Teachers frequently list these learning goals in their lesson plans, make note of them on assignments and performance tasks, and include them in monthly or weekly progress reports that go home to parents.

A crucial consideration in identifying learning goals or standards is determining the degree of specificity. Standards that are too specific make reporting forms cumbersome to use and difficult to understand. Standards that are too broad or general, however, make it hard to identify students' unique strengths and weaknesses. Most state-level standards, for example, tend to be broad and need to be broken down or "unpacked" into homogeneous categories or topics (Marzano, 1999). For grading and reporting purposes, educators must seek a balance. The standards must be broad enough to allow for efficient communication of student learning, yet specific enough to be useful (see Gronlund, 2000; Marzano & Kendall, 1995; Wiggins & McTighe, 1998).

Another issue is the differentiation of standards across marking periods or grade levels. Most schools using standards-based grading develop reporting forms that are based on grade-level learning goals or standards. Each standard has one level of complexity set for each grade that students are expected to meet before the end of the academic year. Most parents, however, are accustomed to grading systems in which learning standards become increasingly complex with each marking period. If the standard states "Students will write clearly and effectively," for example, many parents believe that their children should do this each marking period, not simply move toward doing so by the end of the academic year. This is especially true of parents who encourage their children to attain the highest mark possible in all subject areas every marking period.

To educators using such forms, students who receive 1 or 2 on a 4-point grading scale during the first or second marking period are making appropriate progress and are on track for their grade level. For parents, however, a report card filled with 1s and 2s, when the highest mark is a 4, causes great concern. They think that their children are failing. Although including a statement on the reporting form, such as "Marks indicate progress toward end-of-the-year learning standards," is helpful, it may not alleviate parents' concerns.

Facilitating Interpretation

Many parents initially respond to a standards-based reporting form with, "This is great. But tell me, how is my child doing *really*?" Or they ask, "How is my child doing compared to the other children in the class?" They ask these questions because they don't know how to interpret the information. Further, most parents had comparative, norm-based reporting systems when they were in school and are more familiar with reports that compare students to their classmates. Above all, parents want to make sense of the reporting form. Their fear is that their children will reach the end of the school year and won't have made sufficient progress to be promoted to the next grade.

To ensure more accurate interpretations, several schools use a two-part marking system with their standards-based reporting form (see example). Every marking period, each student receives two marks for each standard. The first mark indicates the student's level of progress with regard to the

standard—a 1, 2, 3, or 4, indicating *beginning*, *progressing*, *proficient*, or *exceptional*. The second mark indicates the relation of that level of progress to established expectations at this point in the school year. For example, a ++ might indicate *advanced for grade-level expectations*, a + might indicate *on target* or *meeting grade-level expectations*, and a – would indicate *below grade-level expectations* or *needs improvement*.

The advantage of this two-part marking system is that it helps parents make sense of the reporting form each marking period. It also helps alleviate their concerns about what seem like low grades and lets them know whether their children are progressing at an appropriate rate. Further, it helps parents take a standards-based perspective in viewing their children's performances. Their question is no longer "Where is my child in comparison to his or her classmates?" but "Where is my child in relation to the grade-level learning goals and expectations?"

The one drawback of the two-part marking system is that expectations must take into account individual differences in students' development of cognitive skills. Because students in any classroom differ in age and cognitive development, some might not meet the specified criteria during a particular marking period—even though they will likely do so before the end of the year. This is especially common in kindergarten and the early primary grades, when students tend to vary widely in their entry-level skills but can make rapid learning progress (Shuster, Lemma, Lynch, & Nadeau, 1996). Educators must take these developmental differences into consideration and must explain them to parents.

Example of a Double-Mark, Standards-Based Reporting Form Elementary Progress Report				
Reading	1st	2nd	3rd	4th
Understands and uses different skills and strategies	1 +	2 ++		
Understands the meaning of what is read	1 ++	2 +		
Reads different materials for a variety of purposes	1 -	2 -		
Reading level		1 ++	2 +	

Work habits	S	S		
Writing	1st	2nd	3rd	4th
Writes clearly and effectively	1+	2++		
Understands and uses the steps in the writing process	1++	2++		
Writes in a variety of forms for different audiences and purposes	1+	2-		
Analyzes and evaluates the effectiveness of written work	N	1+		
Understands and uses the conventions of writing: punctuation, capitalization, spelling, and legibility	1-	2-		
Work habits	S	S		
Communication	1st	2nd	3rd	4th
Uses listening and observational skills to gain understanding	1+	2-		
Communicates ideas clearly and effectively (formal communication)	1-	2+		
Uses communication strategies and skills to work effectively with others (informal	N	1+		

communication)				
Work habits	U	S		

This report is based on grade-level standards established for each subject area. The ratings indicate your student's progress in relation to the year-end standard.

Evaluation Marks

- 4 = Exceptional
- 3 = Meets standard
- 2 = Approaches standard
- 1 = Beginning standard
- N = Not applicable

Level Expectation Marks

- ++ = Advanced
- + = On level
- - = Below level

Social Learning Skills & Effort Marks

- E = Exceptional
- S = Satisfactory
- U = Unsatisfactory

Choosing Performance-Level Descriptors

Standards-based reporting forms that use numerical grading scales also require a key or legend that explains the meaning of each numeral. These descriptors help parents and others understand what each numeral means.

A common set of descriptors matches performance levels 1, 2, 3, and 4 with the achievement labels *beginning*, *progressing*, *proficient*, and *exceptional*. If the standards reflect behavioral aspects of students' performance, then teachers more commonly use such descriptors as *seldom*, *sometimes*, *usually*, and *consistently/independently*. These labels are preferable to *above average*, *average*, and *below average*, which reflect norm-referenced comparisons rather than criterion-referenced standards.

Such achievement descriptors as *exceptional* or *advanced* are also preferable to *exceeds standard* or *extending* to designate the highest level of performance. Educators can usually articulate specific performance criteria for an *exceptional* or *advanced* level of achievement or performance. *Exceeds*

standard or *extending*, however, are much less precise and may leave students and parents wondering just what they need to do to exceed or extend. Descriptors should be clear, concise, and directly interpretable.

Many reporting forms include a fifth level of *not applicable* or *not evaluated* to designate standards that have not yet been addressed or were not assessed during that particular marking period. Including these labels is preferable to leaving the marking spaces blank because parents often interpret a blank space as an item that the teacher missed or neglected.

Maintaining Consistency

A final challenge is consistency. To communicate with parents, most schools and school districts involved in standards-based grading try to maintain a similar reporting format across grade levels. Most also use the same performance-level indicators at all grade levels so that parents don't have to learn a new set of procedures for interpreting the reporting form each year as their children move from one grade level to the next. Many parents also see consistency as an extension of a well-designed curriculum. The standards at each grade level build on and extend those from earlier levels.

While maintaining a similar format across grade levels, however, most schools and school districts list different standards on the reporting form for each level. Although the reporting format and performance indicators remain the same, the standards on the 1st grade reporting form are different from those on the 2nd grade form, and so on. This gives parents a clear picture of the increasing complexity of the standards at each subsequent grade level.

An alternative approach is to develop one form that lists the same broad standards for multiple grades. To clarify the difference at each grade level, a curriculum guidebook describing precisely what the standard means and what criteria are used in evaluating the standard at each grade level usually accompanies the form. Most reporting forms of this type also include a narrative section, in which teachers offer additional explanations. Although this approach to standards-based grading simplifies the reporting form, it also requires significant parent training and a close working relationship among parents, teachers, and school and district leaders (Guskey & Bailey, 2001).

Advantages and Shortcomings

When we establish clear learning goals or standards, standards-based grading offers important information about students' achievement and performance. If sufficiently detailed, the information is useful for both diagnostic and prescriptive purposes. For these reasons, standards-based grading facilitates teaching and learning better than almost any other grading method.

At the same time, standards-based grading has shortcomings. First and foremost, it takes a lot of work. Not only must educators identify the learning goals or standards on which grades will be based, but they also must decide what evidence best illustrates students' attainment of each goal or standard, identify graduated levels of quality for assessing students' performance, and develop reporting tools that communicate teachers' judgements of learning progress. These tasks may add considerably to the workload of teachers and school leaders.

A second shortcoming is that the reporting forms are sometimes too complicated for parents to understand. In their efforts to provide parents with rich information, educators can go overboard and describe learning goals in unnecessary detail. As a result, reporting forms become cumbersome and time-consuming for teachers to complete and difficult for parents to understand. We must seek a crucial balance in identifying standards that are specific enough to provide parents with useful, prescriptive information, but broad enough to allow for efficient communication between educators and parents.

A third shortcoming is that the report may not communicate the appropriateness of students'

progress. Simply reporting a student's level of proficiency with regard to a particular standard communicates nothing about the adequacy of that level of achievement or performance. To make sense of the information, parents need to know how that level of achievement or performance compares to the established learning expectations for that particular grade level.

Finally, although teachers can use standards-based grading at any grade level and in any course of study, most current applications are restricted to the elementary level where there is little curriculum differentiation. In the middle grades and at the secondary level, students usually pursue more diverse courses of study. Because of these curricular differences, standards-based reporting forms at the middle and secondary levels must vary from student to student. The marks need to relate to each student's achievement and performance in his or her particular courses or academic program. Although advances in technology, such as computerized reporting forms, allow educators to provide such individualized reports, relatively few middle and high school educators have taken up the challenge.

New Standards for Grading

As educators clarify student learning goals and standards, the advantages of standards-based grading become increasingly evident. Although it makes reporting forms more detailed and complex, most parents value the richness of the information when the reports are expressed in terms that they can understand and use. Reporting forms that use a two-part marking system show particular promise—but such a system may require additional explanation to parents. Teachers must also set expectations for learning progress not just at the grade level, but also for each marking period.

Successfully implementing standards-based grading and reporting demands a close working relationship among teachers, parents, and school and district leaders. To accurately interpret the reporting form, parents need to know precisely what the standards mean and how to make sense of the various levels of achievement or performance in relation to those standards. Educators must ensure, therefore, that parents are familiar with the language and terminology. Only when all groups understand what grades mean and how they are used to improve student learning will we realize the true value of a standards-based approach to education.

References

- Andrade, H. G. (2000). Using rubrics to promote thinking and learning. *Educational Leadership*, 57(5), 13–18.
- Brookhart, S. M. (1991). Grading practices and validity. *Educational Measurement: Issues and Practice*, 10(1), 35–36.
- Brookhart, S. M. (1993). Teachers' grading practices: Meaning and values. *Journal of Educational Measurement*, 30(2), 123–142.
- Frary, R. B., Cross, L. H., & Weber, L. J. (1993). Testing and grading practices and opinions of secondary teachers of academic subjects: Implications for instruction in measurement. *Educational Measurement: Issues and Practice*, 12(3), 23–30.
- Friedman, S. J., & Frisbie, D. A. (1995). The influence of report cards on the validity of grades reported to parents. *Educational and Psychological Measurement*, 55(1), 5–26.
- Gronlund, N. E. (2000). *How to write and use instructional objectives* (6th ed.). Upper Saddle River, NJ: Merrill.
- Guskey, T. R. (1996). Reporting on student learning: Lessons from the past—Prescriptions for the future. In T. R. Guskey (Ed.), *Communicating student learning: 1996 Yearbook of the Association for Supervision and Curriculum Development* (pp. 13–24). Alexandria, VA:

ASCD.

Guskey, T. R. (1999). Making standards work. *The School Administrator*, 56(9), 44.

Guskey, T. R., & Bailey, J. M. (2001). *Developing grading and reporting systems for student learning*. Thousand Oaks, CA: Corwin Press.

Haladyna, T. M. (1999). *A complete guide to student grading*. Boston: Allyn & Bacon.

Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Endina, MN: Interaction.

Kendall, J. S., & Marzano, R. J. (1995). *The systematic identification and articulation of content standards and benchmarks: Update*. Aurora, CO: McREL.

Kovas, M. A. (1993). Make your grading motivating: Keys to performance-based evaluation. *Quill and Scroll*, 68(1), 10–11.

Krumboltz, J. D., & Yeh, C. J. (1996). Competitive grading sabotages good teaching. *Phi Delta Kappan*, 78(4), 324–326.

Marzano, R. J. (1999). Building curriculum and assessment around standards. *The High School Magazine*, 6(5), 14–19.

Marzano, R. J. (2000). *Transforming classroom grading*. Alexandria, VA: ASCD.

O'Connor, K. (1999). *How to grade for learning*. Arlington Heights, IL: Skylight.

Ornstein, A. C. (1994). Grading practices and policies: An overview and some suggestions. *NASSP Bulletin*, 78(559), 55–64.

Shuster, C., Lemma, P., Lynch, T., & Nadeau, K. (1996). *A study of kindergarten and 1st grade report cards: What are young children expected to learn?* Paper presented at the annual meeting of the American Educational Research Association, New York.

Stiggins, R. J. (2001). *Student-involved classroom assessment* (3rd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Tomlinson, T. (1992). *Hard work and high expectations: Motivating students to learn*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.

Truog, A. L., & Friedman, S. J. (1996). *Evaluating high school teachers' written grading policies from a measurement perspective*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York.

Wiggins, G. (1996). Honesty and fairness: Toward better grading and reporting. In T. R. Guskey (Ed.), *Communicating student learning: 1996 Yearbook of the Association for Supervision and Curriculum Development* (pp. 141–176). Alexandria, VA: ASCD.

Wiggins, G., & McTighe, J. (1998). *Understanding by design*. Alexandria, VA: ASCD.

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Making High School Grades Meaningful

Most teachers base students' grades on more than one factor. The difficulty is figuring out how to weight and combine the different pieces that go into the final mark. Mr. Guskey suggests a system that not only avoids those problems but gives a better overall picture of a student's performance than the traditional single letter grade.

BY THOMAS R. GUSKEY

MICHAEL AND Sheila attend the same high school and take many of the same classes. Michael is an exceptionally bright but obstinate student. He consistently gets high grades on classroom quizzes and tests, even though he rarely completes homework assignments and is often tardy. His compositions and reports show keen insight and present thoughtful analyses of critical issues but are usually turned in two or three days late. Because of his missing homework assignments and lack of punctuality, Michael receives C's in most of his classes, and his grade-point average lands him in the middle of his high school class rankings. But Michael scores at the highest level on the state

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accountability assessment and qualifies for an honors diploma.

Sheila, on the other hand, is an extremely dedicated and hard-working student. She completes every homework assignment, takes advantage of extra-credit options in all of her classes, and regularly attends special study sessions held by her teachers. Yet, despite her efforts, Sheila often performs poorly on classroom quizzes and tests. Her compositions and reports are well organized and turned in on time but rarely demonstrate more than a surface understanding of critical issues. Sheila also receives C's in most of her classes and has a class ranking very similar to Michael's. But because she scores at a low level on the state accountability assessment, Sheila is at risk of receiving an alternative diploma.

A rare situation, you say? Unlikely or even impossible? Ask any high school teacher today and most will tell you that they know students very much like Michael and Sheila. Many will admit that they currently have similar students in their classes. While Michael and Sheila may not be typical high school students, they also are not unusual.

How is it possible for students with such different levels of demonstrated knowledge and skill to receive essentially the same grades in their high school classes? How can they have roughly the same grade-point average and class ranking? What does this tell us about the meaning of high school grades and the students who receive those grades? And, most important, what does this tell us about the grading policies and practices of many high school teachers?

HODGEPODGE GRADING

Many educators contend that the problem lies in the accountability assessments. They believe that the discrepancy between high school course grades and scores on state accountability assessments demonstrates the inadequacy and invalidity of the assessment results.¹ Indeed, these narrow once-a-year assessments may not reveal the true scope or depth of students' knowledge and skills. On the other hand, policy makers argue that teachers are the source of the problem. They think the mismatch between grades and scores on accountability assessments stems from bias and subjectivity in teachers' grading practices.² There is ample evidence that most teachers receive little training in effective grading and that unintentional bias often influences teachers' grade assignments.³ However, a more likely explanation lies in the nature of grading itself and in the

challenges teachers face in assigning grades that offer a fair and accurate picture of students' achievement and performance.

High school teachers today draw from many different sources of evidence in determining students' grades, and studies show that teachers differ in the procedures they use to combine or summarize that evidence.⁴ Some of the major sources of evidence teachers use include:

- | | |
|---------------------------------|---|
| • Major exams or compositions | • Homework completion |
| • Class quizzes | • Homework quality |
| • Reports or projects | • Class participation |
| • Student portfolios | • Work habits and neatness |
| • Exhibits of student work | • Effort |
| • Laboratory projects | • Attendance |
| • Student notebooks or journals | • Punctuality of assignment submissions |
| • Classroom observations | • Class behavior or attitude |
| • Oral presentations | • Progress made |

When asked *which* of these sources of evidence they consider in determining students' grades, some portion of teachers will report using each one of the elements on the list. When asked *how many* of these sources of evidence they include, however, responses vary widely. Some teachers base grades on as few as two or three elements, while others incorporate evidence from as many as 15 or 16 — and this is true even among teachers who teach in the same school.

Two factors seem to account for this variation. First is a lack of clarity about the purpose of grading. Decisions about what evidence to use in determining students' grades are extremely difficult to make when the purpose of grading is unclear. Different sources of evidence vary in their appropriateness and validity depending on the identified purpose.

A second reason for the variation is the format used to report grades. Most high school reporting forms allow only a single grade to be assigned to students for each course or subject area. This compels teachers to distill all of these diverse sources of evidence into a single symbol. The result is a "hodgepodge grade" that includes elements of achievement, attitude, effort, and behavior.⁵ Even when teachers clarify the weighting strategies they use to combine these elements and employ computerized grading programs to ensure accuracy in their computations, the final grade remains a confusing amalgamation that is impossible to interpret and

rarely presents a true picture of a student's proficiency.⁶

To make high school grades more meaningful, we need to address both of these factors. First, we must clarify our purpose in grading. Second, we must decide what evidence best serves that purpose and how best to communicate a summary of that evidence to parents and others.

CLARIFYING PURPOSES AND CRITERIA

When asked to identify the purpose of grading, most high school teachers indicate that grades should describe how well students have achieved the learning goals established for a course. In other words, grades should reflect students' performance based on specific learning criteria. Teachers and students alike prefer this approach because they consider it both fair and equitable.⁷ But, as described earlier, teachers use widely varying criteria to determine students' grades. In most cases, these can be grouped into three broad categories: *product*, *process*, and *progress* criteria.

Product criteria are favored by advocates of standards-based or performance-based approaches to teaching and learning. These educators believe the primary purpose of grading is to communicate a summative evaluation of student achievement and performance.⁸ In other words, they seek to assess *what* students know and are able to do at a particular point in time. Teachers who use product criteria typically base grades exclusively on final examination scores, final reports or projects, overall assessments, and other culminating demonstrations of learning.

Process criteria are emphasized by educators who believe product criteria do not provide a complete picture of student learning. From their perspective, grades should reflect not only the final results but also *how* students got there. Teachers who consider effort or work habits when assigning grades are using process criteria, as are teachers who factor regular classroom quizzes, homework, punctuality of assignments, class participation, or attendance into grade calculations.

Progress criteria are used by educators who believe that the most important aspect of grading is how much students have gained from their learning experiences. Other names for progress criteria include "learning gain," "improvement scoring," "value-added learning," and "educational growth." Some educators draw distinctions between progress, which they measure backward from a final performance standard or goal, and growth, which is measured forward from the place a

student begins on a learning continuum.⁹ However, when achievement is judged using well-defined learning standards that include graduated levels of performance, progress and growth criteria can be considered synonymous.

Teachers who use progress criteria typically look at how much improvement students have made over a specified period of time, rather than just where they are at any one point. As a result, the scoring criteria used in determining student grades may be highly individualized. Most of the current research evidence on the use of progress criteria in grading comes from studies of individualized instruction and special education programs.¹⁰

Because of concerns about student motivation, self-esteem, and the social consequences of grades, few teachers use only product criteria in determining grades. Instead, most routinely base their grading procedures on some combination of all three types of evidence.¹¹ Many also vary their grading criteria from student to student, taking into account individual circumstances.¹² Although teachers defend this practice on the basis of fairness, it seriously blurs the meaning of any grade. Interpreting grades thus becomes exceptionally challenging, not only for parents but also for administrators, community members, and even the students themselves.¹³ A grade of A, for example, may mean that the student knew what was intended before instruction began (product), did not learn as well as expected but tried very hard (process), or simply made significant improvement (progress).

CONFLICTING SOLUTIONS

Recognizing these interpretation problems, most researchers and measurement specialists recommend the exclusive use of product criteria in determining students' grades. They point out that the more process and progress criteria come into play, the more subjective and biased grades become.¹⁴ How can a teacher know, for example, how difficult a task was for students or how hard they worked to complete it?

Many teachers point out, however, that if they use only product criteria in determining grades, some high-ability students will receive high grades with little effort, while the hard work of less-talented students will go unacknowledged. Consider, for example, two students enrolled in the same physical education class. The first is a well-coordinated athlete who can easily perform any task the teacher asks and so typically does not put forth serious effort. The second student is strug-

gling with a weight problem but consistently tries hard, exerts extraordinary effort, and also displays exceptional sportsmanship and cooperation. Nevertheless, this student is unable to perform at the same level as the athlete. Few teachers would consider it fair to use only product criteria in determining the grades of these two students.¹⁵

Teachers also emphasize that, if only product criteria are considered, low-ability students and those who are disadvantaged — the students who must work hardest — have the least incentive to do so. These students find the relationship between high effort and low grades frustrating and often express their frustration with indifference, deception, or disruption.¹⁶

A MEANINGFUL ALTERNATIVE

An increasing number of teachers and schools have adopted a practical solution to the problems associated with incorporating these different learning criteria into student grades: they report separate grades or marks on each set of criteria. In other words, after establishing explicit indicators of product, process, and progress criteria, teachers assign a separate grade to each. In this way grades or marks for learning skills, effort, work habits, and learning progress are kept distinct from assessments of achievement and performance.¹⁷ The intent is to provide a better, more accurate, and much more comprehensive picture of what students accomplish in school.

While high school teachers in the United States are

just beginning to catch on to the idea of separate grades for product, process, and progress criteria, many Canadian educators have used the practice for years.¹⁸ Each marking period teachers assign students an “achievement” grade based on the students’ performance on projects, assessments, and other demonstrations of learning. Often expressed as a letter grade or percentage (A = advanced, B = proficient, C = basic, D = needs improvement, F = unsatisfactory), this “achievement” grade represents the teacher’s judgment of the student’s level of performance or accomplishment relative to explicit learning goals established for the course. Computations of grade-point averages and class ranks are based solely on these “achievement” or product grades.

In addition, teachers also assign separate grades or marks for homework, class participation, punctuality of assignment submissions, effort, learning progress, and the like. Because these factors usually relate to specific student behaviors, most teachers record numerical marks for each (4 = consistently, 3 = usually, 2 = sometimes, and 1 = rarely). To clarify a mark’s meaning, teachers identify specific behavioral indicators for these factors and for the levels of performance in each. For example, the indicators for a “homework” mark might include:

4 = All homework assignments completed and turned in on time.

3 = Only one or two missing or incomplete homework assignments.

2 = Three to five missing or incomplete homework assignments.

1 = Numerous missing or incomplete homework assignments.

Teachers sometimes question the need for this level of specificity. Upon reflection, however, most discover that by including homework assignments as part of an overall grade for students, they already face this challenge. When determining an overall grade, teachers must decide how much credit to give students for completing homework assignments or how much to take away for assignments that were turned in late or not at all. Similarly, when reporting a separate grade for homework, teachers must ensure that students understand the various performance levels so that they know what the mark signifies and what must be done to improve.

Often teachers presume that reporting multiple grades will increase their grading workload. But those who use the procedure claim that it actually makes grading easier and less work. Teachers gather the same evidence on student learning that they did when calculating an over-



“What’s a dial?”

all grade but no longer worry about how to weight or combine that evidence. As a result, they avoid irresolvable arguments about the appropriateness or fairness of various weighting strategies.

Reporting separate grades for product, process, and progress criteria also makes grading more meaningful. If a parent questions the teacher about a product grade, for example, the teacher simply points to the various

The key to success in reporting multiple grades rests on the clear specification of indicators related to product, process, and progress criteria.

process indicators and suggests, "Perhaps if your child completed homework assignments and participated more in class, the 'achievement' grade would be higher." Parents favor the practice because it provides a more comprehensive profile of their child's performance in school. Employers and college admission officers also like systems of separate grades because they offer more detailed information on students' accomplishments. With all grades reported on the transcript, a college admissions office can distinguish between the student who earned high achievement grades with relatively little effort and the one who earned equally high grades through diligence and hard work. The transcript thus becomes a more robust document, presenting a better and more discerning portrait of students' high school experiences.¹⁹

Schools would still have the information needed to compute grade-point averages and class rankings, if such computations are still deemed important. Now, however, those averages and rankings would be untainted by undefined aspects of process and progress. As such, they would represent a more valid and appropriate measure of achievement and performance. Furthermore, to the extent that classroom assessments and state accountability assessments are based on the same standards for learning, the relationship between product grades and accountability assessment results would likely be much higher.

The key to success in reporting multiple grades, however, rests on the clear specification of indicators related to product, process, and progress criteria. Teachers must be able to describe exactly how they plan to evaluate students' achievement, attitude, effort, behavior, and

progress. Then they must clearly communicate these criteria to students, parents, and others.

CONCLUSION

The relationship between high school grades and students' performance on state accountability assessments will never be perfect. Grades are derived from courses that can vary significantly across schools and classrooms. In contrast, state accountability assessments typically are designed to measure proficiency based on a set of common standards for student learning. As such, the developers of these types of assessments purposefully avoid content that may be unique to particular learners or learning situations. Furthermore, course grades normally reflect a much broader range of knowledge and skills than can be measured by limited accountability assessments with restricted modes of student response.²⁰ Nevertheless, concerns about honesty and fairness compel us to reduce the mismatch between these two important measures of student knowledge and skill.

Developing meaningful, reasonable, and equitable grading policies and practices will continue to challenge high school educators. The challenge remains all the more daunting, however, if we continue to use reporting forms that require teachers to combine so many diverse sources of evidence into a single grade. Distinguishing specific "product" criteria on which to base an "achievement" grade allows teachers to offer a better and more precise description of students' academic achievement and performance. To the extent that "process" criteria related to homework, class participation, attitude, effort, responsibility, behavior, and other nonacademic factors remain important, they too can be reported. But they should be reported separately. Adopting this approach will clarify the meaning of grades and greatly enhance their communicative value.

1. See, for example, Robert T. Brennan et al., "The Relative Equitability of High-Stakes Testing Versus Teacher-Assigned Grades: An Analysis of the Massachusetts Comprehensive Assessment System (MCAS)," *Harvard Educational Review*, Summer 2001, pp. 173-216.

2. Randy Elliot Bennett et al., "Influence of Behavior Perceptions and Gender on Teachers' Judgments of Students' Academic Skill," *Journal of Educational Psychology*, June 1993, pp. 347-56; John R. Hills, "Apathy Concerning Grading and Testing," *Phi Delta Kappan*, March 1991, pp. 540-45; and Clyde A. Wiles, "Investigating Gender Bias in the Evaluations of Middle School Teachers of Mathematics," *School Science and Mathematics*, October 1992, pp. 295-98.

3. Susan Austin and Richard McCann, "Here's Another Arbitrary Grade for Your Collection: A Statewide Study of Grading Policies," paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1992; Roger A. Boothroyd and Robert F. McMorris, "What Do Teachers Know About Testing and How Did They

Find Out?," paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, 1992; and Richard J. Stiggins, "Inside High School Grading Practices: Building a Research Agenda," *Educational Measurement: Issues and Practice*, Summer 1989, pp. 5-14.

4. Gregory J. Cizek, Shawn M. Fitzgerald, and Robert E. Rchor, "Teachers' Assessment Practices: Preparation, Isolation, and the Kitchen Sink," *Educational Assessment*, vol. 3, 1995/1996, pp. 159-79; and James H. McMillan, "Secondary Teachers' Classroom Assessment and Grading Practices," *Educational Measurement: Issues and Practice*, March 2001, pp. 20-32.

5. Susan M. Brookhart, "Grading Practices and Validity," *Educational Measurement: Issues and Practice*, March 1991, pp. 35-36; and Lawrence H. Cross and Robert B. Frary, "Hodgepodge Grading: Endorsed by Students and Teachers Alike," paper presented at the annual meeting of the National Council on Measurement in Education, New York, 1996.

6. See David T. Conley, "Who Is Proficient?: The Relationship Between Proficiency Scores and Grades," paper presented at the annual meeting of the American Educational Research Association, New Orleans, 2000; and Thomas R. Guskey, "Computerized Gradebooks and the Myth of Objectivity," *Phi Delta Kappan*, June 2002, pp. 775-80.

7. Marcia A. Kovas, "Make Your Grading Motivating: Keys to Performance Based Evaluation," *Quill and Scroll*, October/November 1993, pp. 10-11.

8. Stephen J. Friedman, "Grading Teachers' Grading Policies," *NASSP Bulletin*, April 1998, pp. 77-83; and Ken O'Connor, *How to Grade for Learning: Linking Grades to Standards*, 2nd ed. (Arlington Heights, Ill.: SkyLight, 2002).

9. See, for example, Grant Wiggins, "Honesty and Fairness: Toward Better Grading and Reporting," in Thomas R. Guskey, ed., *Communicating Student Learning: 1996 Yearbook of the Association for Supervision and Curriculum Development* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1996), pp. 141-76.

10. Warren W. Esty and Anne R. Teppo, "Grade Assignment Based on Progressive Improvement," *Mathematics Teacher*, November 1992, pp. 616-18; and Russell Gersten, Sharon Vaughn, and Susan U. Brengel-man, "Grading and Academic Feedback for Special Education Students and Students with Learning Difficulties," in Guskey, *Communicating Student Learning*, pp. 47-57.

11. Susan M. Brookhart, "Teachers' Grading Practices: Meaning and Values," *Journal of Educational Measurement*, Summer 1993, pp. 123-142; Cross and Frary, op. cit.; Stephen J. Friedman and Merlin Manley, "Improving High School Grading Practices: Experts vs. Practitioners," *NASSP Bulletin*, vol. 76, 1992, pp. 100-104; Fe' Josefa G. Nava and Brenda H. Loyd, "An Investigation of Achievement and Nonachievement Criteria in Elementary and Secondary School Grading," paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1992.

12. Stephen J. Friedman and Anthony J. Troug, "Evaluation of High School Teachers' Written Grading Policies," *ERS Spectrum*, Summer 1999, pp. 34-42; and Gary Natriello, Carolyn J. Riehl, and Aaron M. Pallas, *Between the Rock of Standards and the Hard Place of Accommodation: Evaluation Practices of Teachers in High Schools Serving Disadvantaged Students* (Baltimore: Center for Research on Effective Schooling for Disadvan-

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tagged Students, Johns Hopkins University, 1994).

13. Stephen J. Friedman and David A. Frisbie, "The Influence of Report Cards on the Validity of Grades Reported to Parents," *Educational and Psychological Measurement*, February 1995, pp. 5-26; Kristie K. Waltman and David A. Frisbie, "Parents' Understanding of Their Children's Report Card Grades," *Applied Measurement in Education*, vol. 7, 1994, pp. 223-40; and Warren W. Willingham, Judith M. Pollack, and Charles Lewis, "Grades and Test Scores: Accounting for Observed Differences," *Journal of Educational Measurement*, Spring 2002, pp. 1-37.

14. Allan C. Ornstein, "Grading Practices and Policies: An Overview and Some Suggestions," *NASSP Bulletin*, April 1994, pp. 55-64.

15. See Thomas R. Guskey and Jane M. Bailey, *Developing Grading and Reporting Systems for Student Learning* (Thousand Oaks, Calif.: Corwin Press, 2001).

16. Tommy Tomlinson, *Hard Work and High Expectations: Motivating Students to Learn* (Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education, 1992).

17. Thomas R. Guskey, *How's My Kid Doing? A Parent's Guide to Grades, Marks, and Report Cards* (San Francisco: Jossey Bass, 2002); and Richard J. Stiggins, "Communicating with Report Cards," in idem, *Student-Involvement Assessment for Learning*, 4th ed. (Upper Saddle River, N.J.: Pearson Education, 2005), pp. 275-319.

18. Jane Bailey and Jay McTighe, "Reporting Achievement at the Secondary Level: What and How," in Guskey, *Communicating Student Learning*, pp. 119-40.

19. Clifford Adelman, *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment* (Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education, 1999).

20. Willingham, Pollack, and Lewis, op. cit.

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Computerized Gradebooks And the Myth Of Objectivity



Computerized grading programs and electronic gradebooks can be useful tools. But in the end, Mr. Guskey reminds us, teachers must still decide what grade offers the most accurate and fairest

description of each student's achievement and level of performance.

BY THOMAS R. GUSKEY

IF YOU ASK middle school or high school teachers today how they determine their students' grades, the first thing most of them will do is open a computerized grading program. They'll show you the vast array of data they keep on each student and explain how they weigh the different pieces of information. At the end of the marking period, they combine these various measures and, with the help of the computer, calculate a summary score to the one-hundred-thousandth of a decimal point. The computer then converts this summary score into the letter grade that is printed on a report card and sent home to parents. Many teachers will also go on to describe the fairness and objectivity of this process, pointing out how the mathematical precision of the computer makes it easy for them to explain and to defend their grading policies to students, to parents, and to administrators.

But do computerized gradebooks really make grading fairer and more objective? Or have the technical capabilities of these programs seduced teachers and school leaders into a false sense of confidence in the

accuracy and validity of the grades they assign?

COMPUTERIZED GRADEBOOKS

Computerized grading programs and electronic gradebooks rank among the best-selling computer software available to educators today. They appeal to teachers primarily because they simplify record-keeping. The spreadsheet formats and database management systems

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TABLE 1.
Summary Grades Tallied by Three Different Methods

Student	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Average Score	Grade	Median Score	Grade	Deleting Lowest	Grade
1	59	69	79	89	99	79	C	79	C	84	B
2	99	89	79	69	59	79	C	79	C	84	B
3	77	80	80	78	80	79	C	80	B	79.5	C
4	49	49	98	99	100	79	C	98	A	86.5	B
5	100	99	98	49	49	79	C	98	A	86.5	B
6	0	98	98	99	100	79	C	98	A	98.8	A
7	100	99	98	98	0	79	C	98	A	98.8	A

Grading Scale: 90%-100%=A, 80%-89%=B, 70%-79%=C, 60%-69%=D, 59% or lower=F.

included in these programs make it easy for teachers to enter and tally precisely large amounts of numerical information.¹ Thus they are suited particularly well to the point-based grading systems of middle school and high school teachers, who often record numerical data on the performance of more than 100 students each week.

Most computerized grading programs also present educators with a wide range of options. Some simply help teachers to keep more detailed records on students' learning progress.² Others allow teachers to present summaries of their students' achievement and performance in a variety of different formats, including computer displays, online reports, and even digital portfolios. Still other programs actually perform grading tasks. The simplest of these scan, mark, and analyze assessments composed of true/false, matching, and multiple-choice items. More recently, however, exciting advances have been made in the use of computers to evaluate and grade students' essays, compositions, and other writing samples.³

For all their advantages, however, computerized grading programs also have their shortcomings. Perhaps the most serious is that they lead the educators who use them to believe that mathematical precision necessarily brings greater objectivity and enhanced fairness to grading. Many teachers assume that, so long as the mathematical calculations are correct and all students are treated the same, then the grades assigned are accurate and just. But numerical precision is not the same as evaluative fairness, honesty, or truth. While computerized grading programs and electronic gradebooks may greatly simplify record-keeping, they do not lessen the challenge involved in assigning grades that accurately and honestly reflect students' level of performance.

MATHEMATICAL PRECISION VERSUS VALID GRADES

Consider, for example, the data in Table 1. The scores on the left side of the table reflect the performance of seven students over five instructional units. The scores on the right represent summary scores for these students calculated by three different methods. The first method is the simple arithmetic average of the unit scores, with all units receiving equal weight. The second is the median or middle score from the five units.⁴ Because the median is positional rather than proportional, it's not influenced by extreme scores, as is an average. The third method is also an arithmetic average, but with the lowest unit score in the group deleted. This method is based on the assumption that no one, including students, performs at a peak level all the time.⁵ These are the three tallying methods most frequently used by teachers and most commonly employed in computerized grading programs and electronic gradebooks.

Consider, too, the following explanations for these score patterns:

- Student 1 struggled in the early part of the marking period but continued to work hard, improved in each unit, and performed excellently in unit 5.
- Student 2 began with excellent performance in unit 1 but then lost motivation, declined steadily during the marking period, and received a failing mark for unit 5.
- Student 3 performed steadily throughout the marking period, receiving three B's and two C's, both near the cutoff between B and C.
- Student 4 began the marking period poorly and failed the first two units but, with newfound interest, performed excellently in units 3, 4, and 5.

- Student 5 began the marking period excellently but then lost interest and failed the last two units.

- Student 6 skipped school (an unexcused absence) during the first unit but performed excellently in every other unit.

- Student 7 performed excellently in the first four units but was caught cheating on the assessment for unit 5 and received a score of zero for that unit.

As is evident from Table 1, all three of these tallying methods are mathematically precise. Yet each one yields a very different pattern of grades for these seven students. If you use the simple arithmetic average, all seven students would receive the same grade of C. If you use the median, there would be just two C's, one B, and four A's. And if you use an arithmetic average with the lowest score deleted, there would be just one C, four B's, and two A's. Note, too, that the one student who would receive a grade of C using this third method had unit grades of just two C's and three B's. More important, not one student would receive the same grade across all three methods. In fact, two students (Student 4 and Student 5) could receive a grade of A, B, or C, depending on the tallying method you use.

The teacher responsible for assigning grades to the performance of these seven students has to answer a number of difficult questions. For example, which of these three methods is fairest? Which method provides the most accurate summary of each student's achievement and level of performance? Do all seven students deserve the same grade, as using the arithmetic average suggests, or are there defensible reasons to justify different grades for certain students? And if there are reasons to justify different grades, can these reasons be clearly specified? Can they be fairly and equitably applied to the performance of all students? Can these reasons be clearly communicated to students before instruction begins? Would it be fair to apply them if they were not communicated to students?

The nature of the assessment information from which these scores are derived could make matters even more tangled. It might make a difference, for example, if the content of each unit assessment was cumulative. In other words, the assessment for unit 2 contained material from units 1 and 2, and the unit 5 assessment included material from all five previous units. And if it did, would this make these grading decisions any easier, or would it further complicate summary calculations?

What should be evident in this example is that the use of computerized grading programs won't solve these

complex grading problems. Although such programs can simplify numerical record-keeping, the mathematical precision they offer does not make the grading process any more objective or any fairer. Calculating a summary score to the one-hundred-thousandth of a decimal point doesn't yield a more accurate depiction of students' achievement and level of performance. Each teacher still must decide what information goes into the calculation, what weight will be attached to each source of information, and what method will be used to tally and summarize that information.

This example also illustrates several questionable grading practices that computerized grading programs typically ignore. Although not new and certainly not inherent in the use of technology in grading, the potentially harmful effects of these practices make it imperative that educators carefully examine their impact and consider other alternatives. Three such practices include 1) averaging scores to determine a grade, 2) the use of zeroes, and 3) taking credit away from students or lowering their grade because of behavioral infractions.

AVERAGING SCORES TO DETERMINE A GRADE

If a mark or grade is supposed to represent an accurate description of how well students have learned, as most experts on grading agree it should,⁶ then the practice of averaging generally falls far short. For example, how often have you heard students lament, "I have to get an A on the final exam in order to pass this course"? But does this situation really make sense, or does it illustrate the inappropriateness of averaging? If a final examination or summative performance truly represents a comprehensive assessment of what students have learned, how can an A level of performance there translate to a C or D for the course grade? Similarly, if a final grade is to reflect what students have learned and can do at the end of the course, can averaging scores from past assessments with measures of current performance be considered appropriate?

Educators generally recognize learning as a progressive and incremental process. Most also agree that students should have multiple opportunities to demonstrate their learning. But is it fair to consider all these learning trials in determining students' grades? If at any time in the instructional process students demonstrate that they've learned the concepts well and mastered the intended learning goals, doesn't that make all previous information on their learning of those con-



cepts inaccurate and invalid? Why then should such information be “averaged in” when determining students’ grades?

Because any single measure of learning can be unreliable, most researchers recommend using several indicators to determine students’ marks or grades.⁷ Nevertheless, teachers must continually ask themselves, “What information provides the most accurate depiction of students’ learning at this time?” In nearly all cases, the answer is “the most current information.” If students demonstrate that past assessment results no longer accurately reflect their learning, that information must be discarded and replaced by the new information. Continuing to rely on past assessment data miscommunicates students’ achievement. Can you imagine, for example, the karate teacher suggesting that a student who starts with a white belt but then progresses to earn a black belt actually deserves a gray belt?

Averaging can also have detrimental effects on student motivation. Suppose, for example, that a student does poorly on one or two major assessments administered early in the marking period, as was the case with Student 4 and Student 6 in Table 1. Knowing that those scores will be “averaged in” as part of the final grade, what motivation do these students have to do well on other assessments? Even if they perform at the highest level from that time on, the practice of averaging gives them virtually no chance of attaining a high grade.

And consider this extreme but true occurrence. A high school student I know experienced the death of

a beloved family member during the first marking period of his senior year. The trauma of that experience proved exceptionally difficult for this young man. As a result, he neglected his schoolwork completely and received failing grades in all his courses. But then, with help from counselors, family and community members, and his teachers, he recovered emotionally, re-dedicated himself to his schooling, and with diligent effort attained A’s in all his courses during the remaining three marking periods of the school year. Because of his school’s policy of averaging, however, his final course grades were all C’s. Did those C’s accurately reflect what he had learned? Did they represent what he had accomplished? Did they adequately describe his achievement or level of performance? Was this fair?

Recognizing that single measures of student learning can be flawed or unreliable, most teachers use multiple sources of information when assigning marks or grades. But simply combining all such measures and calculating an average is rarely appropriate or fair. Some educators argue that the median or middle score provides a more appropriate measure,⁸ but that practice, too, can be problematic.

To provide an accurate summary of students’ performance, teachers must begin by looking for consistency in the evidence gathered. If that evidence is consistent across several indicators, then deciding what grade to assign is relatively straightforward. This would be the case, for example, for students who obtained very similar scores on a class project, on two summative examinations, and on an oral report. But even these cases get complicated when scores consistently fall near the cutoff between two grades. Note, for example, the scores of Student 3 in Table 1.

If the evidence of student achievement is inconsistent, then teachers must look deeper and search for the reasons why.⁹ They also have to face the difficult challenge of deciding what evidence or combination of evidence represents the truest and most appropriate summary of students’ achievement and performance. In such cases, three general guidelines can be recommended.¹⁰

First, the most recent evidence should always be given priority or greater weight. Because grades are usually meant to represent students’ current achievement status or level of performance, the most accurate evidence is generally the evidence collected most recently. Therefore, scores from assessments at the end of the marking period are typically more representa-

tive of what students have learned than those collected at the beginning.

A second strategy is to give priority or greater weight to the most comprehensive forms of evidence. If certain sources of evidence represent cumulative summaries of the knowledge and skills students have acquired, then these should hold the greatest weight in determining students' grades. Exceptions to this approach might be necessary, however, for students who suffer inordinate test or performance anxiety. Such students typically do remarkably well on assignments, quizzes, and class discussions, but then "freeze" during larger assessments or performances. In these cases, teachers may have to consider other means of gathering evidence, such as orally questioning those students or providing some other means for them to demonstrate their learning, in order to get a more valid representation of what they can do.

A third approach would be to "rank order" the evidence gathered in terms of its importance to the learning goals or standards of the course. Those sources of evidence that relate to the most important goals or standards should then be given priority. For example, teachers might attach greater importance to students' scores on a project that required them to synthesize and apply what they had learned than they might give to the scores students attained on assessments designed to tap basic knowledge and comprehension of course content.

Whatever strategy teachers choose, they must be sure to apply that strategy consistently. Although exceptions to accommodate unusual or extenuating circumstances are always permissible, fairness in grading dictates that teachers inform students about their grading policies and practices in advance and then faithfully and consistently apply those policies.

THE USE OF ZEROES

Few teachers believe that grades should be used to punish students for their lack of effort or for demonstrating inadequate responsibility. At the same time, however, many teachers assign zeroes to student work that is missed, neglected, or turned in late.¹¹ Obviously, if grades are to represent how well students have learned, then the practice of assigning zeroes for "administrative or behavioral" reasons clearly misses the mark.

Zeroes have an even more profound effect if combined with the practice of averaging. Students who receive a single zero have little chance of success because

such an extreme score so drastically skews the average. (Note, for example, the scores of Student 6 and Student 7 in Table 1.) For this reason, in scoring Olympic events like gymnastics and diving, the highest and lowest judges' scores are always eliminated before the averaging takes place. If they were not, a single judge could control the results of an entire competition simply by giving extreme scores.

Some teachers defend the practice of assigning zeroes by arguing that they cannot give students credit for work that is incomplete or not turned in — and that's certainly true. But there are far better ways to motivate and encourage students to complete assignments than by assigning them zeroes, especially considering the overwhelmingly negative effects.

One alternative approach is to assign an "incomplete" and then require students to do additional work to bring their performance up to an acceptable level. Students who miss an assignment or neglect a project deadline, for example, might be required to attend after-school study sessions or special Saturday school programs in order to complete their work. In other words, these students are not "let off the hook" with a zero. Instead, students learn that they have responsibilities in school and that their actions have specific consequences. In addition, it helps to make the grade a more accurate reflection of what the students have actually learned.

LOWERING GRADES BECAUSE OF BEHAVIOR

Another typical grading practice with detrimental effects is lowering students' grades because of behavioral infractions. Some teachers lower students' grades for classroom disruptions and similar forms of misconduct. Other teachers consider tardiness or class attendance in determining students' grades and often reduce the grades of students who are late or who miss class sessions. Teachers also vary widely in how they handle such offenses as plagiarism, copying another student's work, and other forms of "cheating." But most teachers weigh such transgressions heavily when determining students' grades.

Student 6 and Student 7 in Table 1 offer excellent examples. Although Student 6 performed exceptionally well throughout most of the marking period, a zero due to an unexcused absence could severely affect his or her course grade. Student 7 performed excellently in four units but was then caught cheating on the assessment for unit 5 and received a zero. Most teachers

would undoubtedly consider this a fair response to Student 7's infraction. But when it comes to determining this student's course grade, the issues become thornier. Some teachers would look at the achievement history over the marking period, conclude that this incident was an exception, and assign the student a high grade. Others would reason that the high marks in earlier units could well have been attained through cheating as well, although the student didn't get caught. Hence, they would feel justified in assigning a lower grade.

The essential question the teacher must address in each of these cases is, "What is the purpose of grading?" If the purpose of grading is to present a summary judgment of students' achievement and level of performance, then to count these behavioral infractions in determining the grade clearly miscommunicates. Although such infractions cannot be ignored, it's clear that they are not part of the evidence that shows what these students have learned and are able to do.

A better strategy is to report these behavioral infractions separately and not include them as part of the course grade. For example, in a growing number of schools, reporting forms are designed to include indicators of students' class behaviors and work habits in addition to grades representing their achievement and level of performance.¹² In other words, teachers report "multiple grades" in each course, separating evidence of students' learning from information about their behavior and conduct.

Some educators might feel that reporting multiple grades makes both record-keeping and grading procedures overly complicated. But those who use this approach report that it actually simplifies grading. They collect no additional information from students and have eliminated the final step of having to combine these diverse sources of evidence. By separating the different aspects of students' performance in school, these teachers provide more specific information to parents and to students. In addition, they are able to identify more clearly students' strengths as well as areas in which improvement is needed.

Computerized grading programs and electronic gradebooks greatly simplify the record-keeping tasks teachers face. They allow teachers to collect and efficiently summarize large amounts of data on student learning. But the efficiency and mathematical precision of these programs does not make the grades they generate more accurate, honest, fair, or objective.

Grading requires careful planning, thoughtful judgment, a clear focus on purpose, excellent communication skills, and an overriding concern for the well-being of students — qualities that no computer possesses. Teachers at all levels must make carefully reasoned decisions about which components will be included in determining students' grades, how those components will be combined and summarized, and what format will be used to report the summaries. While computerized grading programs and electronic gradebooks can be useful tools, they do not relieve teachers of the professional responsibilities involved in making these crucial decisions. In the end, teachers must still decide what grade offers the most accurate and fairest description of each student's achievement and level of performance.

1. Joe Huber, "Gradebook Programs: Which Ones Make the Grade?," *Technology Connection*, vol. 4, no. 1, 1997, pp. 21-23; and Edward L. Vockell and Douglas J. Fiore, "Electronic Gradebooks: What Current Programs Can Do for Teachers," *Clearing House*, vol. 66, 1993, pp. 141-45.

2. Kenneth W. Eastwood, "Reporting Student Progress: One District's Attempt with Student Literacy," in Thomas R. Guskey, ed., *Communicating Student Learning: 1996 Yearbook of the Association for Supervision and Curriculum Development* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1996), pp. 65-78.

3. Ellis B. Page and Nancy S. Petersen, "The Computer Moves into Essay Grading: Updating the Ancient Test," *Phi Delta Kappan*, March 1995, pp. 561-65; and William Wresch, "The Imminence of Grading Essays by Computer — 25 Years Later," *Computers and Composition*, vol. 10, no. 2, 1993, pp. 45-58.

4. Russell G. Wright, "Success for All: The Median Is the Key," *Phi Delta Kappan*, May 1994, pp. 723-25.

5. Robert Lynn Canady and Phyllis Riley Hotchkiss, "It's a Good Score! Just a Bad Grade," *Phi Delta Kappan*, September 1989, pp. 68-71.

6. Thomas M. Haladyna, *A Complete Guide to Student Grading* (Boston: Allyn & Bacon, 1999); Robert J. Marzano, *Transforming Classroom Grading* (Alexandria, Va.: Association for Supervision and Curriculum Development, 2000); Ken O'Connor, *How to Grade for Learning* (Arlington Heights, Ill.: Skylight, 1999); and Richard J. Stiggins, *Student-Involvement Classroom Assessment*, 3rd ed. (Upper Saddle River, N.J.: Merrill/Prentice-Hall, 2001), pp. 409-65.

7. Gary Natriello, "The Impact of Evaluation Processes on Students," *Educational Psychologist*, vol. 22, 1987, pp. 155-75.

8. Wright, op. cit.

9. Susan M. Brookhart, "Teaching About Communicating Assessment Results and Grading," *Educational Measurement: Issues and Practice*, vol. 18, 1999, pp. 5-13.

10. Thomas R. Guskey and Jane M. Bailey, *Developing Grading and Reporting Systems for Student Learning* (Thousand Oaks, Calif.: Corwin Press, 2001).

11. Canady and Hotchkiss, op. cit.; Richard J. Stiggins and Daniel L. Duke, "District Grading Policies and Their Potential Impact on At-Risk Students," paper presented at the annual meeting of the American Educational Research Association, Chicago, 1991.

12. Cathy Costello and Barry McKillop, "Dealing with Lates and Absences," *Orbit*, vol. 30, no. 4, 2000, pp. 43-46.

PREVIEW

Zeros are seldom an accurate description of a student's achievement and skew average grades dramatically.

Instead of prompting greater effort, zeros and the low grades they yield more often cause students to withdraw from learning.

One alternative to zeros is to assign an "I" or "Incomplete" grade with explicit requirements for completing the work.

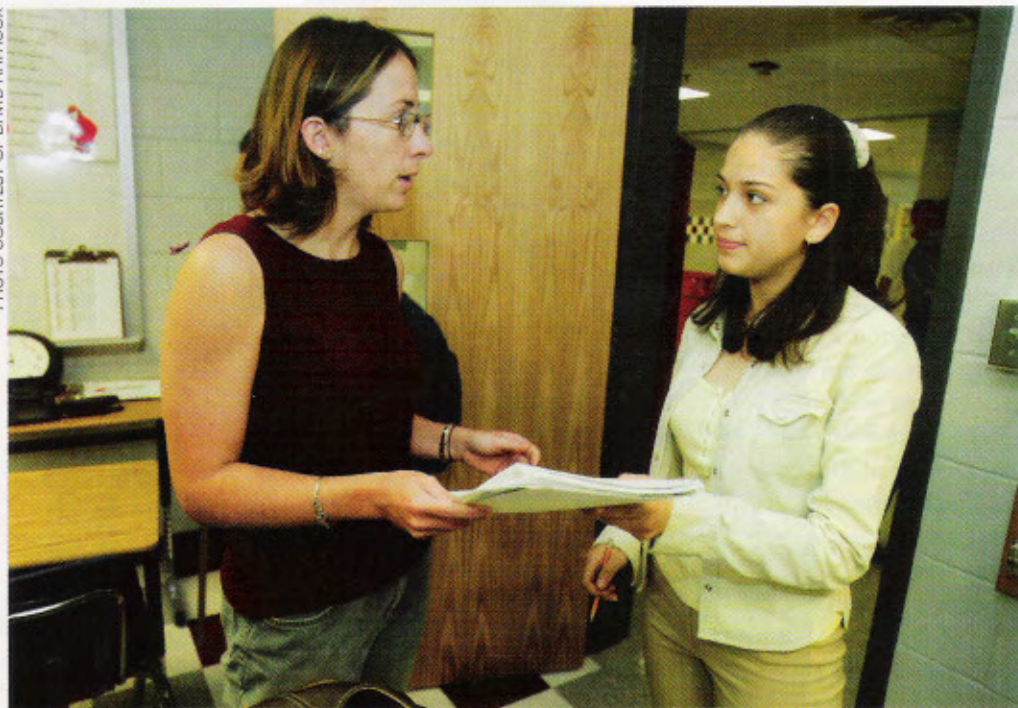


Alternatives

BY THOMAS R. GUSKEY

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Gradings is one of a teacher's greatest challenges and most important professional responsibilities. However, few teachers have any formal training in grading methods and most teachers have limited knowledge about the effectiveness of various grading practices (Stiggins, 1993; Brookhart, 2004). As a consequence, when teachers develop their grading policies, they typically reflect back on what they experienced as students and use strategies that they perceived to be fair, reasonable, and equitable (Guskey & Bailey, 2001). In other words, most teachers do what was done to them.



Grades should be a way of communicating with students about achievement and working to help students improve.

According to Frisbie and Waltman (1992), when teachers are asked why they grade or what purpose grading serves, their responses generally fall into six broad categories:

- To communicate the achievement status of students to parents and others. Grading and reporting provide parents and guardians with information about students' progress and allow them to be involved in the educational process.
- To provide information students can use for self-evaluation. Grading and reporting give students information about the adequacy of their academic performance.
- To select, identify, or group students for specific educational paths or programs. High grades are typically required for entry into advanced classes or honors programs; low grades are often the first indicator of learning problems that can result in a student's placement into a special needs program. In addition, grades are used as a criterion for admission to colleges and universities.
- To provide incentives for students to learn. Although some may debate the idea, there is extensive evidence that grades and other reporting methods are important factors in determining the amount of effort that students put forth and how seriously students regard a learning task (Chastain, 1990; Cameron & Pierce, 1994, 1996).
- To evaluate the effectiveness of instructional programs. Grade distributions are often compared to judge the effectiveness of new programs or instructional techniques.
- To provide evidence of a student's lack of effort or inability to accept responsibility for inappropriate behavior. Grades and other reporting devices are frequently

used to document unsuitable behaviors on the part of students, and some teachers threaten students with poor grades in an effort to encourage more acceptable behaviors.

Although all of these may be legitimate, teachers seldom agree on which one is the most important. As a result, teachers often attempt to address *all* of these purposes with a single grading procedure or policy and usually end up achieving none of these purposes very well (Brookhart, 1991; Austin & McCann, 1992; Cross & Frary, 1996).

Nearly all teachers do agree, however, that the least important purpose is the sixth one: *To provide evidence of students' lack of effort or inability*

to accept responsibility for inappropriate behavior. But few teachers recognize that many of their grading practices serve precisely this purpose. The most obvious example is when teachers assign zeros to students' work that is missed, neglected, or turned in late.

The Use of Zeros

Many teachers see zeros as their ultimate grading weapon. They use zeros in grading to punish students for not putting forth adequate effort or for failing to demonstrate appropriate responsibility. Students receive zeros for not meeting established deadlines, for misbehaving in class, or for refusing to heed the teacher's warnings (Canady & Hotchkiss, 1989; Stiggins & Duke, 1991). Some teachers recognize that assigning zeros punishes students academically for behavioral infractions; nevertheless, most believe that such punishment is justified and deserved.

Teachers also use zeros as instruments of control. In most instances, teachers have little direct influence over the privileges that students most value or the punishments they most fear. For example, teachers cannot restrict students' access to automobiles, computer games, or television. Nor can they limit students' social activities. But teachers do control grades, and grades can indirectly influence those privileges and punishments. A low grade often prompts parents to enforce punishments that are more persuasive and more compelling to students than those that a teacher can enforce. The threat of a zero—and the resulting low grade—allows teachers to impose their will on students who otherwise might be indifferent to a teacher's demands.



If the grade is to represent how well students have learned, mastered established learning standards, or achieved specified learning goals, then the practice of assigning zeros clearly misses the mark.

The problems associated with assigning zeros, however, are numerous and significant. First, a zero is seldom an accurate reflection of what a student has learned or is able to do (Raebeck, 1993). Obviously, if the grade is to represent how well students have learned, mastered established learning standards, or achieved specified learning goals, then the practice of assigning zeros clearly misses the mark.

Second, the effect of assigning zeros is greatly magnified if combined with the common practice of averaging scores to attain students' overall course grades. Students readily see that receiving a single zero leaves them little chance for success or a high grade because such an extreme score drastically skews the average. That is why in scoring such Olympic events as gymnastics or diving, the highest and lowest scores from judges are always eliminated. If they were not, one judge could control the entire competition simply by giving extreme scores. A single zero has more influence on an average than any other score in the group.

Third, and perhaps most important, no studies support the use of zeros or low grades as effective punishments. Instead of prompting greater effort, zeros and the low grades they yield more often cause students to withdraw from learning. To protect their self-images, many regard their low mark or grade as irrelevant and meaningless. Other students may blame themselves for the low grade but often feel helpless to make improvements (Selby & Murphy, 1992).

Alternatives to Assigning Zeros

Frequently, teachers defend the practice of assigning zeros by arguing that they cannot give students credit for work that is incomplete or not turned in—and that is certainly true. But, considering these overwhelmingly negative effects, there are far better ways to motivate and encourage students to complete assignments in a timely manner than through the use of zeros.

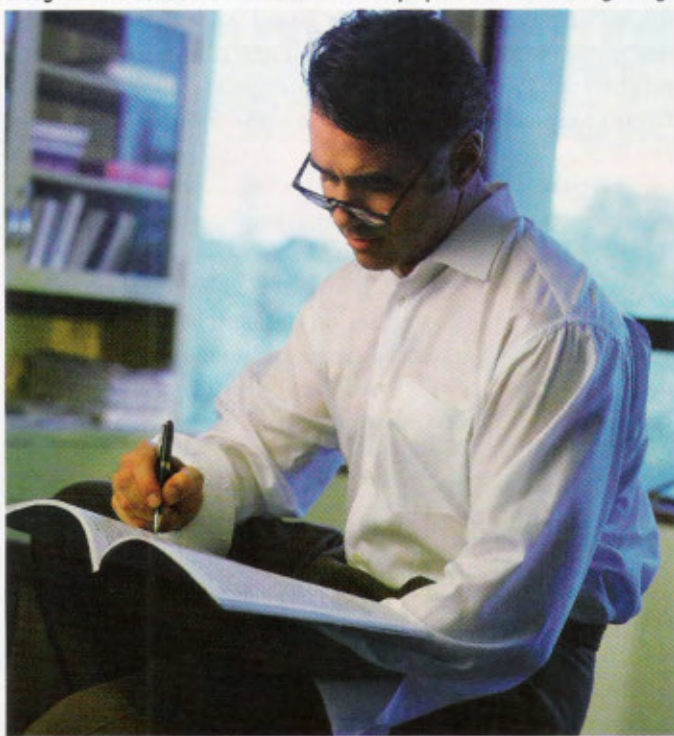
Several schools have implemented the following alternatives and experienced great success.

Assign "I" or "Incomplete" grades. One alternative to zeros is to assign an "I" or "Incomplete" grade with explicit requirements for completing the work. The consequence of receiving an "I" is usually required attendance at a special study session after school or a special Saturday class where students work to complete neglected assignments to a satisfactory level.

In other words, students are not let off the hook with a zero. Instead, they learn that they have specific responsibilities in school and that their actions have definite consequences. Not completing assigned work on time means that students must attend special after-school or Saturday sessions to complete the work—and no excuses are accepted. The consequence is direct, immediate, and academically sound.

Of course, implementing such a policy requires additional funding for the necessary support mechanisms. Teachers, volunteer parents, or older students must staff these after-school or Saturday sessions. In addition, the sessions require classroom space, and supplementary transportation may also be needed. Schools that implement such policies, however, generally find that they actually save money in the long run (E. Bernetich, personal communication, February 6, 1998). When students realize that their teachers are serious about school responsibilities, they also get serious about them. Because the consequences and the accompanying assistance of this policy are immediate, it

Developing a responsible grading system without the use of zeros requires thoughtful and deliberate decisions about the purpose and manner of grading.



STOCK PHOTO IMAGE

Teachers must consider what message they want to communicate through grading, who the primary audience for the message is, and what the intended goal of the communication is.

helps students to remedy learning or behavioral difficulties before they become major problems. As a result, less time and fewer resources will be needed for major remediation efforts in the future. Further, this policy is far more beneficial and fairer to students than simply assigning zeros because it makes a grade a more accurate reflection of what students have learned.

Report behavioral aspects separately. Another alternative to assigning zeros is to report behavioral aspects of students' performance separately. For example, in many Canadian secondary schools, students receive multiple grades for each of their classes—both on the report card and on grade transcripts (Bailey & McTighe, 1996). A main "achievement" grade is based on evidence of students' academic performance. This achievement grade might include results from major examinations, scores from compositions or reports, or portfolio or project assessments. But on the basis of specific criteria, teachers offer separate grades or marks for homework, punctuality of assignments, class participation, effort, and so on. These aspects of students' performance are typically labeled *learning skills, work habits, or academic behaviors*.

Reporting multiple grades on different aspects of student performance may appear to create additional work for teachers. However, Canadian teachers who use this approach claim that it is easier and requires less work than assigning a single grade. These teachers gather the same evidence on student performance as other teachers. But by reporting multiple grades, they avoid the problems associated with combining many diverse sources of information into a single amalgamated grade. They are also spared from arguments about what "weight" to assign to each category or source of evidence. Most important, the grades they assign are more meaningful. Calculations of GPA and class rank, for example, more accurately reflect students' academic performance

because they are based solely on "achievement" grades that are untainted by nonacademic, behavioral factors (Stiggins, 2001; Wiggins, 1996).

Change grading scales. One of the easiest and least objectionable ways to lessen the negative effects of zeros is to change grading scales. Schools using this approach shift from percentage grading scales where, for example, A = 90–100%, B = 80%–89%, C = 70%–79% and so on, to whole number scales where A = 4, B = 3, C = 2, and so on. In other words, although teachers can still assign zeros to student work that is missed, neglected, or turned in late, the effect of a zero is lessened because it is not so extreme.

Although this approach ignores the problem of the grade not representing an accurate reflection of student learning, it does reduce the damage imposed by the extreme value of zero in a percentage grading system.

Abandoning the Zero

Teachers at all levels would undoubtedly prefer that students' motivation for learning be entirely intrinsic. Most recognize, however, that grades and other reporting methods are important factors in determining how much effort students put forth (Chastain, 1990; Cameron & Pierce, 1994). Unfortunately, this recognition leads some teachers to use grades as weapons to punish students, even though the practice has no educational value and, in the long run, adversely affects students, teachers, and the relationship they share.

Developing honest and fair grading policies should begin with candid discussions about the purpose of grading and reporting. Teachers must consider what message they want to communicate through grading, who the primary audience for the message is, and what the intended goal of the communication is. Once issues about purpose are resolved, decisions about the appropriateness of various grading policies—and the use of zeros—are much easier to address and resolve. If guided by reflections on the true purpose of grading, it is likely that teachers at all levels will abandon the use of zeros completely. **PL**

References

- Austin, S., & McCann, R. (1992). *Here's another arbitrary grade for your collection: A statewide study of grading policies*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Bailey, J., & McTighe, J. (1996). Reporting achievement at the secondary level: What and how. In T. R. Guskey (Ed.), *Communicating student learning. 1996 Yearbook of the Association for Supervision*

and Curriculum Development (pp. 119-140). Alexandria, VA: Association for Supervision and Curriculum Development.

□ Brookhart, S. M. (1991). Grading practices and validity. *Educational Measurement: Issues and Practice*, 10(1), 35-36.

□ Brookhart, S. M. (2004). *Grading*. Upper Saddle River, NJ: Prentice-Hall.

□ Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analysis. *Review of Educational Research*, 64(3), 363-423.

□ Cameron, J., & Pierce, W. D. (1996). The debate about rewards and intrinsic motivation: Protests and accusations do not alter the results. *Review of Educational Research*, 66(1), 39-51.

□ Canady, R. L., & Hotchkiss, P. R. (1989). It's a good score! Just a bad grade. *Phi Delta Kappan*, 71(1), 68-71.

□ Chastain, K. (1990). Characteristics of graded and ungraded compositions. *Modern Language Journal*, 74(1), 10-14.

□ Cross, L. H., & Frary, R. B. (1996). *Hodgepodge grading: Endorsed by students and teachers alike*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York.

□ Frisbie, D. A., & Waltman, K. K. (1992). Developing a personal grading plan. *Educational Measurement: Issues and Practices*, 11(3), 35-42.

□ Guskey, T. R., & Bailey, J. M. (2001). *Developing grading and reporting systems for student learning*. Thousand Oaks, CA: Corwin.

□ Raebeck, B. (1993). *Exploding myths, exploring truths: Humane, productive grading and grouping in the quality middle school*. Paper presented at the annual conference and exhibit of the National Middle School Association, Portland, OR.

□ Roderick, M., & Camburn, E. (1999). Risk and recovery from course failure in the early years of high school. *American Educational Research Journal*, 36(2), 303-343.

□ Selby, D., & Murphy, S. (1992). Graded or degraded: Perceptions of letter-grading for mainstreamed learning-disabled students. *British Columbia Journal of Special Education*, 16(1), 92-104.

□ Stiggins, R. J. (1993). Teacher training in assessment: Overcoming the neglect. In S. L. Wise (Ed.), *Teacher training in measurement and assessment skills* (pp. 27-40). Lincoln, NE: Buros Institute of Mental Measurements.

□ Stiggins, R. J. (2001). *Student-involved classroom assessment* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.

□ Stiggins, R. J., & Duke, D. L. (1991). *District grading policies and their potential impact on at-risk students*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

□ Wiggins, G. (1996). Honesty and fairness: Toward better grading and reporting. In T. R. Guskey (Ed.), *Communicating student learning: 1996 Yearbook of the Association for Supervision and Curriculum Development* (pp. 141-176). Alexandria, VA: Association for Supervision and Curriculum Development.