

Breaking Up the Grade

Thomas R. Guskey

To make grading more meaningful, course grades should reflect a range of distinct criteria that make up student learning.

Imagine a medical examination where your physician records data on your height, weight, blood pressure, and heart rate, and asks you questions about your lifestyle and how you feel. Suppose your physician then enters these data into a computer that uses an algorithm to calculate a single number to describe your physical condition. Your physician tells you the number, offers a few suggestions on how to improve it, then sends you on your way.

Would you be satisfied with such an examination or have faith in a physician who analyzed information about you in this way? Would you find a single computer-generated number informative or helpful?

Few people would answer yes to these questions. Most would probably find such a process insulting. We want and expect more. We want our physician to be a thoughtful, knowledgeable professional who carefully looks at different aspects of the data in assessing our health. We expect our physician to evaluate that information thoroughly and understand its nuances. And we certainly want more than a single, computer-generated number from the diverse sources of evidence our physician gathers.

Although we find such a process unacceptable in a physical examination, few object to *teachers* using a nearly identical process when determining students' report card grades. Combining the diverse evidence teachers gather on student performance into a single grade, however, is just as inadequate as it would be for a physician in describing a person's physical condition.

Instead, we must find ways to provide a more descriptive profile or "dashboard" of information that meaningfully summarizes the different aspects of student performance. At a minimum, we must provide multiple grades for each subject area or course on students' report cards. This is not only a requirement in standards-based approaches to education, it's an essential first step in implementing any meaningful grading reform.

The Inadequacy of a Single Grade

Every marking period, teachers gather evidence on student performance from many different sources to determine students' grades. Most teachers consider students' scores on major examinations, compositions, projects and reports, and classroom quizzes. Many include data on homework completion, class participation, and punctuality in turning in assignments. Some teachers gather additional information on students' behavior, collaboration with classmates, and effort. Teachers enter these data into a computerized grading program that calculates a single grade, which is recorded on the report card.

Studies show, however, that teachers vary widely in the number of evidence sources they use and how they combine that evidence in determining students' grades. This is true even among teachers who teach at the same grade level in the same school (Guskey & Brookhart, 2019; Guskey & Link, 2017).

Two reasons account for this variation in how teachers determine grades. First is a lack of clarity and consensus about the purpose of grading. It's extremely difficult to make consistent decisions about what evidence to use in determining students' report card grades when we don't agree on the purpose of grading. Different sources of evidence vary in their appropriateness and validity, depending on what we want to communicate, who the primary audience is, and what we hope will result (Guskey & Link, 2019).

A second reason for the variation is the format teachers use to report grades. Nearly all computerized grading programs are based on traditional models that require a single grade to be assigned to students for each subject area or course. This forces teachers to distill all these diverse sources of evidence into a single number or symbol, resulting in what researchers call a "hodgepodge" grade (Brookhart, 1991) that mixes achievement and other factors related to effort, behavior, attitude, and improvement. Even when teachers clarify the weighting strategies used to combine these elements and employ a common mathematical algorithm in tallying the scores, the final grade remains a confusing amalgamation that's impossible to interpret with any accuracy or clarity (Cross & Frary, 1999).

The simple truth is that a single number describing a student's performance in school is just as ineffectual and difficult to interpret as a single number describing someone's physical health. That number or grade combines diverse data, gathered through different means and measuring a variety of different attributes. As such, it's not informative, meaningful, helpful, or equitable.

Three Types of Learning

To make grading reflective of learning, three major types of grading criteria *must* be distinguished in reporting student performance: *product* and *progress* criteria, which relate to academic achievement and cognitive outcomes, and *process* criteria, which describe noncognitive behaviors, dispositions, and social-emotional learning skills (Guskey, 1994, 1996).

Product criteria reflect how well students have achieved specific academic learning goals, standards, or competencies. These might be determined by students' performance on major examinations, projects, reports, or other culminating demonstrations of learning. Product criteria describe students' academic achievements, what they have learned and are able to do as a result of their experiences in school.

Progress criteria, sometimes called "growth," or "development" criteria, show how much students have gained or improved in their learning. Although related to product criteria, progress criteria are distinct. It would be possible, for example, for students to make outstanding progress, but still not be achieving at grade level or meeting specific academic goals. It also would be possible for highly skilled students to show they've achieved the product criteria without making notable progress or improvement.

Process criteria describe student behaviors that facilitate, broaden, or extend learning. These may be things that enable learning, such as performance on formative assessments, homework, and class participation. They also may reflect extended learning goals related to noncognitive social-emotional learning skills such as collaboration, goal setting, perseverance, habits of mind, or citizenship. In some cases, process criteria relate to students' compliance with class procedures, like turning in assignments on time.

Educators who emphasize process criteria believe that product criteria alone don't provide a complete picture of student performance. They believe grades should reflect not only final achievement results, but also *how* students got there. Others stress that certain noncognitive skills are just as important as academic achievement to students' success in school and life. Such skills need to be considered in grading so students and families recognize their value.

Figure 1 lists process criteria that educators frequently identify as important. This list is not comprehensive. Other important learning outcomes—like honor, courage, kindness, thoroughness, or generosity—may be identified as important and added to the list. The main point is that these criteria are different from students' academic skills and should be reported separately.

Figure 1. Process Learning Criteria

Learning Enablers	
Attitude in class	Goal setting
Class attendance / Participation	Homework completion & quality
Class quizzes or "Spot-Checks"	Notebook / Journal completion
Daily class work	Planning & Organization
Effort	Study skills
Engagement	Time management
Formative assessments	Work habits
Social & Emotional Learning	
Citizenship/Community involvement	Leadership
Collaboration / Teamwork	Motivation
Compassion	Persistence / Perseverance
Conscientiousness	Reflection
Cooperation with classmates	Resilience
Empathy / Perspective taking	Respect
Ethics	Responsibility / Accountability
Flexibility / Adaptability	Self-advocacy
Grit	Self-awareness
Growth mindset	Self-efficacy
Habits of mind	Self-discipline / Self-direction
Help seeking & providing	Social skills
Initiative / Self-direction	Tenacity
Integrity	Tolerance
Compliance	
Behavior in class	Neatness of work
Conduct	Punctuality in assignments
Following directions	Punctuality to class

Source: Get Set, Go! Creating Successful Grading and Reporting Systems by T. R. Guskey. (Solution Tree, 2020).

Advantages of Reporting Multiple Grades

Because of concerns about student motivation, self-esteem, and the social consequences of grades, few teachers use only product criteria in determining grades. Most base their grading procedures on some combination of all three types of evidence (Sun & Cheng, 2013). Many teachers even vary their grading criteria from student to student, taking into account individual circumstances (Duncan & Noonan, 2007). Although teachers defend this practice on the basis of fairness, it seriously blurs the meaning of any grade. An A, for example, might mean that the student knew all the concepts before instruction began (product), that she *didn't* achieve the grade-level or course learning goals but made significant improvement (progress), or that she put forth extraordinary effort (process).

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 progress and process criteria come into play, the more subjective, biased, and inequitable grades become (Randall & Engelhard, 2010). 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, some high-ability students will receive high grades with little effort, while the hard work of less-talented students goes unacknowledged.

Consider 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. However, this student puts forth little effort and displays unsportsmanlike conduct. The second student is physically uncoordinated, but consistently exerts exceptional effort and displays outstanding sportsmanship. Nevertheless, this student cannot perform tasks 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.

Teachers also emphasize that if they consider only product criteria, lower-ability and disadvantaged students—those who often must work hardest—have the least incentive to do so. These students find the fact that they try yet get low grades frustrating, and often express their frustration with indifference, deception, or disruption.




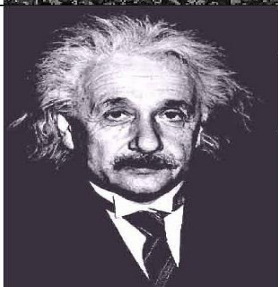
For these reasons, the use of nonacademic factors in determining grades appears prevalent in every subject area and at all grade levels. A survey of secondary music teachers, for example, revealed that their grades contained an average of 60 percent consideration of nonacademic factors like students' attendance and self-reported practice time (Russell & Austin, 2010).

Although the three types of learning criteria vary in their importance depending on the subject area and grade level, all three are essential to school success. And meaningful communication about students' school performance requires that teachers report them separately.

Making It Practical ...

Reporting multiple grades has a long-established history in other developed countries. Figure 2 shows an example of a high school report card adapted from one used in a Canadian school district that reports product and process criteria separately. Academic achievement (product) grades are recorded as letter grades while behavior (process) grades are based on a 1–4 rubric score. It also includes a two-part narrative for each class, including comments about what the class is learning and individual students.

Figure 2. Sample High School Report Card with Multiple Grades

	Ms. Angelou – Language Arts				
	Achievement A	Participation 4	Homework 2	Punctuality 3	Effort 3
	This quarter we focused on poetry and different poetic forms. Students read both well-known and lesser-known poets and constructed their own poems. Chris actively participated in class discussions and wrote several excellent poems, but needs to be more conscientious about completing homework assignments on time.				
	Mr. Mori – Algebra II				
	Achievement B	Participation 3	Homework 1	Punctuality 3	Effort 3
	Our class worked on solving complex problems using higher order equations. We also explored problem applications in physics. Chris did fairly well on class quizzes and assessments, and I am sure would do better if homework exercises were completed.				
	Ms. Roosevelt – Western Civilization				
	Achievement A	Participation 4	Homework 3	Punctuality 4	Effort 4
	We explored the influence of the Roman Empire on modern society, especially in language and government. Students also worked in teams to develop cooperative projects related to various aspects of Roman society. Chris was an active participant in all class activities, demonstrated a deep understanding of all issues, and was a valued contributor on the project				
	Mr. Einstein -- Physics				
	Achievement B	Participation 2	Homework 2	Punctuality 3	Effort 3
	This quarter we concentrated on the physics of atomic and subatomic particles. Students solved problems related to relativity. Chris did well on most classroom quizzes and large assessments, but needs to become a more active participant in class discussions.				

Source: Developing Standards-based Report Cards by T. R. Guskey & J. M. Bailey. (Corwin, 2010).

This report card wouldn't be considered a true standards-based report card because it lists no grades for individual learning standards or competencies. Furthermore, no policies direct teachers in this district on how to determine the achievement (product) grade. Teachers use whatever evidence sources they believe best reflect students' academic achievement and align with the stated purpose of the grade. They pull out evidence on the noncognitive (process) elements of participation, homework, punctuality, and effort and report those separately. These multiple grades are then summarized and reported on each student's transcript.

Once teachers become accustomed to reporting multiple grades, most find it easier to transition to standards-based reporting formats. They recognize how they can break down an overall achievement grade to separately report the strands of different standards that it summarizes. Many see this transition as a natural progression in their efforts to provide more accurate, meaningful summaries of students' performance.

The biggest challenge for teachers and school leaders in reporting multiple grades is determining which particular product, progress, and process criteria to report. This requires deep thinking about the learning criteria most important to students' success in school—and beyond. It also involves finding an acceptable balance between providing enough detail to be meaningful, but not so much that it creates a bookkeeping burden for teachers.

... Without Requiring More Work

Ironically, reporting multiple grades for these different criteria doesn't require extra work for teachers. In fact, it's less work. Teachers already gather evidence on different product, progress, and process criteria. For example, most keep records of students' scores on various measures of achievement, as well as formative assessment results, homework completion, class participation, collaboration in projects, etc. By simply reporting separate grades for these different aspects of learning, teachers avoid the dilemmas involved in determining how much each should be weighted in calculating a single grade.

Reporting multiple grades on the report card and transcript further emphasizes to students that these different aspects of their performance are all important. Parents benefit because the report card provides a more detailed, comprehensive picture of their child's performance. In addition, because product grades are no longer tainted by evidence based on students' behavior or compliance, those grades more closely align with external measures of achievement and content mastery, such as state assessments, AP exam results, and ACT or SAT scores—a quality college and university admissions officers favor (Buckmiller & Peters, 2018).

An important challenge in reporting multiple grades involves developing clear rubrics describing each type of criteria, so that expectations for students' performance are well-defined. If teachers decide to offer a separate rating for homework, for example, they must articulate the difference in ratings between a student who completes an assignment but does so incorrectly and one who completes only half the assignment but what she completed is correct. Similarly, in assigning a rating for class participation, teachers must consider if frequently contributing to class

discussions is all that's necessary – or if the *quality* of contributions must also be taken into account. Making such distinctions not only clarifies reporting, it offers students important guidance in developing academic abilities and noncognitive life skills.

Better Communication

Grading and reporting are more a challenge in effective communication than a simple task of quantifying data on students' performance. Providing multiple grades that reflect product, progress, and process criteria enhances the meaning and accuracy of that communication. Without adding to educators' workload, this strategy can do much to improve the effectiveness of grading and reporting. It provides more meaningful information, facilitates communication between school and home, ensures greater equity in grading, and offers direction in ways to improve students' performance.

Editor's note: This article is excerpted with permission from the book *Get Set, Go! Creating Successful Grading and Reporting Systems* by Thomas R. Guskey (2020, Solution Tree Press, Bloomington, Indiana).

Reflect & Discuss

- What evidence do teachers in your school usually combine to yield a letter grade at the end of the marking period? Does evidence unrelated to academic proficiency (like attitude, attendance, etc.) factor in? Should it?
- Guskey claims true grading reform can't happen unless report cards show several grades for every student in every course. Do you agree? Do you think report cards in your school or district should be changed? In what ways?

References

- Brookhart, S. M. (1991). Grading practices and validity. *Educational Measurement: Issues and Practice*, 10(1), 35–36.
- Buckmiller, T. M., & Peters, R. E. (2018). Getting a fair shot? *School Administrator*, 75(2), 22–25.
- Cross, L. H., & Frary, R. B. (1999). Hodgepodge grading: Endorsed by students and teachers alike. *Applied Measurement in Education*, 12, 53–72.
- Duncan, R. C., & Noonan, B. (2007). Factors affecting teachers' grading and assessment practices. *Alberta Journal of Educational Research*, 53, 1–21.

- Guskey, T. R. (1994). Making the grade: What benefits students. *Educational Leadership*, 52(2), 14–20.
- 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 ASCD* (pp. 13–24). Alexandria, VA: ASCD.
- Guskey, T. R., & Brookhart, S. M. (Eds.) (2019). *What we know about grading: What works, what doesn't, and what's next*. Alexandria, VA: ASCD.
- Guskey, T. R., & Link, L. J. (2017, April). *Grades represent achievement and "something else:" Analysis of the non-achievement factors teachers consider in determining students' grades*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Guskey, T. R., & Link, L. J. (2019). Exploring the factors teachers consider in determining students' grades. *Assessment in Education: Principles, Policy & Practice*, 26(3), 303–320.
- Randall, J., & Engelhard, G. (2010). Examining the grading practices of teachers. *Teaching and Teacher Education*, 26, 1372–1380.
- Russell, J. A., & Austin, J. R. (2010). Assessment practices of secondary music teachers. *Journal of Research in Music Education*, 58(1), 37–54.
- Sun, Y., & Cheng, L. (2013). Teachers' grading practices: Meaning and values assigned. *Assessment in Education: Principles, Policy & Practice*, 21, 326–343.

Thomas R. Guskey is Professor Emeritus in the College of Education, University of Kentucky.