

Grades: Measuring Academic Targets with Frequency

Teachers may want to use assignment or quiz/test grades as one measure of whether a classroom academic intervention improves a student's performance on schoolwork. After all, grades offer several advantages: they are already being collected, have the potential to register even modest academic gains, and are easily understood by all stakeholders, including students, parents, and teachers.

However, grades can also present drawbacks that diminish their utility as a progress-monitoring tool. One frequent problem is that a grade may not represent a 'pure' measure of academic performance because it is determined in part by non-ability factors (Guskey & Jung, 2012). For example, a student may receive a grade of 70 on a homework assignment that includes a 10-point penalty for late submission. Grades that are a composite of ability and non-ability factors are compromised as intervention measures because they can fluctuate for reasons unrelated to actual skill or performance.

A second drawback in many grading systems is that opportunities for grading occur infrequently (Weinstein & Wu, 2009). In a math course, for example, in which tests are given only at the end of each quarterly marking period, the teacher would have no more than 4 grade data-points at the end of the year to judge student intervention progress—too few to reveal any meaningful pattern of progress.

Here are two simple strategies, however, that can transform grades into one viable means to monitor the progress of academic interventions: (1) revise grading systems to yield a 'pure' measure of academic performance, and (2) offer frequent opportunities for grading student work.

Revise Grading to Yield a 'Pure' Measure of Academic Performance. The fact that grades can be used to track any aspect of student work is both a strength and potential liability. We know that grades can measure academic elements such as number of correctly solve math problems or the quality of an argumentative essay. But they can also incorporate evaluations unrelated to student skills such as whether an assignment was turned in on time. When grades mix scholastic and non-scholastic elements, they lose much of their utility as a tool to monitor the progress of academic interventions—because the 'signal' of student performance can be obscured by the 'noise' of factors other than academics (Guskey & Jung, 2012).

The trick for making grades a data source capable of reliably tracking the impact of an intervention is to partition the global grade into academic and non-academic components. The teacher then has the option to average the two components to calculate a composite grade. The advantage of this approach is that the instructor can use just the academic grade as a 'pure' measure of the student's actual performance. Here are examples of teachers following somewhat different procedures to yield academic grades suitable for tracking intervention progress:

- **Grade for Academics: Example 1.** Ms. Villere, a science instructor, assigns weekly homework requiring that students carry out short experiments and document their results.

She teaches her student Roger how to use a planning strategy to better organize the conducting and recording of his experiments. The instructor grades these lab assignments using a number of academic and non-academic criteria. To generate a pure measure of scholastic performance, the teacher first grades the assignment on a 0-to-100-point scale using only academic criteria. This preliminary 'academic' score is the one she will record to track improvements in Roger's school performance. Then Ms. Villere applies the non-academic criteria, deducting points for any lapses such as late submission. The resulting composite grade is the one that she shares with students and enters in her grade book as the 'real' grade for the assignment.

- **Grade for Academics: Example 2.** Mr. Defoe develops a system for grading papers in his English class. Three-quarters of the paper grade (maximum: 75 points) is determined by demonstrated academic proficiency—the student's demonstration of writing skill and submission of evidence of his or her planning and revising process. One quarter of the grade (maximum: 25 points) is tied to non-academic factors—those not directly related to writing skills, such as neatness of the paper and timeliness of submission. Mr. Defoe has several students in the classroom on writing interventions who use organizers and other tools to improve their writing product. He will therefore employ the academic-skill sub-score only to track student progress on these writing interventions.

Increase Frequency of Grading Opportunities. The power of grades as a data source increases significantly when opportunities for grading occur more often (Weinstein & Wu, 2009). If possible, think about collecting relevant gradable student work at least weekly to provide a volume of grading information sufficient to evaluate ongoing growth in performance. The most immediate benefit of more frequent grading is that the teacher has an improved real-time sense of academic performance across the entire class, allowing that instructor to identify content that needs to be clarified or retaught. And of course increasing the stream of grading information also permits that teacher to track short-term improvements in course performance for specific students. Here are 2 examples of teachers who increase the flow of grades to better monitor students:

- **Increase Grading Opportunities: Example 1:** Prior to class discussion of readings assigned as homework, Ms. Letezio, a social studies teacher, routinely starts the class period by administering a 5-item multiple-choice Readiness Assessment Test (RAT) (Weinstein & Wu, 2009) to gauge student understanding of the passage. She grades the test on a scale of 0=Limited Knowledge to 5=Strong Knowledge. She directs a student, Russell, to use a self-guided comprehension strategy as an intervention during his outside reading. Ms. Letezio employs the RAT results as one data source to track the effectiveness of Russell's intervention plan and sets the objective of moving the student from his current average RAT score of 2 up to a goal grade of at least 4.
- **Increase Grading Opportunities: Example 2:** Once per week, Mr. Roland, gives his students a 10-minute 'extra-credit' quiz with short-answer questions covering content that will appear on the next examination (Padilla-Walker, 2006). The quiz is graded according to a traditional 0-to-100-point scale. Mr. Roland starts an intervention plan with a student, Lucinda, targeting increased participation in group discussion and improved note-taking. He will monitor her performance on these mini-quizzes, with the goal of moving her grade up from the current 50 average to 70 or above.

References

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