Rethinking Grading In A 21st Century Project-Based Learning Environment
by **Terry Heick**
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Summary: In Project-Based Learning, achievements can encourage students by clarifying complexity and rewarding nuance in performance.

Whether a letter or a number, any singular alphanumeric expression meant to evaluate a student's understanding or academic performance is problematic.

In the last several years, numeric evaluations have replaced letter grades in some districts, where a student might get a 3 out of 4, rather than a B-, but this can be confusing as well. Because the letter grade is such a powerful cultural standard, learners and parents immediately take the given number and calculate a corresponding letter grade so it makes sense to them.

And worse, while on any given rubric a 3 out of 4 will usually indicate mastery of critical skills and concepts in the assignment, some simple math would seem to indicate this "mastery" score is a 75%, which is right on the edge of a D in most districts.

So while letter grades and numbers are simply and clear—A is good, F represents failure; 1 is Novice, 4 is Distinguished—each miss the complexity and messiness of the learning process, and can ultimately fail the student.

The Role of Grades

Before you can evaluate the performance of any grading or scoring system, it must be clear what the goal or function of such system is. What should a "grade" do?

Communicate learning progress to educators to differentiate planned instruction?

Create transparency for learner performance in school for families and communities?

Offer the learner immediate feedback on a given assignment?

Encourage the student to proceed–and exactly *how* to proceed–when they are uncertain?

Communicate cognitive potential to higher-ed or professional audiences?

How about document achievements, encourage progress, enable self-assessment and self-correction that is immediate and personal, and provide broader definitions of academic success to families and communities?

Research

A study published online in APA's Journal of Experimental Psychology: General, showed that in groups where difficulty and failure were explained as "normal," students' short-term memory performed better. When such accommodations for difficulty were replaced with pressure to perform, memory and reading

comprehension–and thus academic performance–decreased.

Achievements have the ability to communicate the nuanced complexity of assignments in a way that a rubric or a letter grade cannot, while at the same time offering mechanics of encouragement during critical stages of an assignment or project.

"Learning takes time and each step in the process should be rewarded, especially at early stages when students most likely will experience failure," says Frederique Autin, PhD, a postdoctoral researcher at the University of Poitiers in Poitiers, France who helped guide the study.

Project-Based Learning & Grading
In a typical project, a rubric will be offered early on. Teachers will communicate the details of the rubric and help students understand (or even set) goals. Necessary resources will be identified, a timeline will be sketched out, and project management will essentially begin.

There will usually be checkpoints between the project's inception and completion, where feedback can be offered and grades can be collected. When the project is complete, grades for supporting assignments will be compiled, the project will be graded against the rubric, and a new project will begin.

While a well-planned project may continue to resonate, the letter grade ends the academic portion of the project. The grade is given, communicated to students and parents, internalized by the students, and then–that's it. With traditional grading, at this point it's all over beyond a single letter as a matter of the

student's permanent record.

Achievements, however, permanently extend academic performance by connecting all assignments, and making all success (and failure) transparent to a variety of critical stakeholders.

But perhaps most importantly, by clarifying the incredible complexity a well-conceived project really has, the rigor of learning–and the cognitive progress learners are asked to make–are now visible. By offering achievements as extremely high-hanging fruit, not only are high standards being communicated, but so is the relative challenge of earning that achievement.

When a whole system of achievements are designed, it can have the total effect of genuine academic inclusion. Achievements are available for a variety of tasks–turning in a pre-project plan on time, sharing a revision with a certain collaborative group, redesigning a sketch in the face of crowdsourced feedback, and so on. Achievements have an inherent differentiation about them that letters and numbers can't hope to duplicate.

Not More Grading–More Communication

What if, instead of a grade, there were 30 achievements for a given project? Let's say they were Platinum, Gold, Silver, and Bronze. Here, these four categories aren't some patronizing, generic redressing of letter grades, but rather a system of academic performance, where there are only 2 Platinum achievements, 8 Gold, 12 Silver, and 14 Bronze.

Platinum achievements are the highest level–a reward not simply for the Gifted

readers and writers, but for the determined, the innovative, and the collaborative. In this system, not all students will earn a Platinum–the project can be completed, and proficiency of standards can be communicated without earning this highest level.

While Platinum achievements are indeed accessible to all learners–they could even be differentiated per student to recognize individual interests, goals, or areas for growth–earning one wouldn't be automatic. In fact, many projects might be completed without a single student ever earning a Platinum achievement. This system would clearly communicate to learners that certain components of a given project are very difficult–and that the low number of earned Platinum trophies are proof of that.

And proof that a Platinum is possible.

Not every achievement would have to be standards-based. Early on in a project, they could be given for completion of important tasks–establishing a timeline, pitching an idea to the group with enthusiasm, paraphrasing a confusing rubric–to not only encourage students, but communicate to them their potential, and make micro-success far more visible to them than most classroom teachers have the time to manage.

Conclusion

In a system of achievements, each student's "academic tracks" would be visible to everyone–most crucially to themselves. They wouldn't be forced to make sense of cognitive triumphs or gaps on their own through crude, imprecise letter grades. Rather, their performance would be clearly spelled out in greater diversity–and

thus greater precision. The nuance of their performance would be apparent to everyone–without patronization, without missing each learner's successes within a project, and without well-intentioned but ultimately ham-fisted evaluations.

They could also be awarded right away, as they were earned, helping communicate progress and inform instruction, as truly formative–and informative–assessment.

And instead of one grade being given–and one story being told–there'd by 40.

This article was originally written by Terry Heick for Edudemic Magazine.