# The Trouble with Grading: From Concealing to Revealing Real Learning 

Joe Bower<br>Alternative Schools, Red Deer, Alberta

Follow this and additional works at: https://scholarworks.uni.edu/istj
Part of the Science and Mathematics Education Commons

## Recommended Citation

Bower, Joe (2011) "The Trouble with Grading: From Concealing to Revealing Real Learning," Iowa Science Teachers Journal: Vol. 38 : No. 3, Article 5.
Available at: https://scholarworks.uni.edu/istj/vol38/iss3/5

This Article is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in lowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.


Photo by ralaenin. Additional Graphic Work by Joe Taylor

ABSTRACT: Traditional grading, such as multiple choice and bubble filling testing, cannot provide the sort of information needed by the teacher to assess a student's understanding. There is a better way. This article explains the author's move to break away from traditional grading and replace it with a zero-question project-based assessment strategy.
"A mark or grade is an inadequate report of an inaccurate judgment by a biased and variable judge of the extent to which a student has attained an indefinite amount of material."

When I share with others that I assess my students everyday without ever grading them, the responses are often thick with bewilderment. While it is true that some congratulate me in a kind of envious tip of the hat, most teachers and parents struggle to rationalize how a classroom could even function without grading. Some like the idea - others don't but almost no one can begin to conceive an alternative. This inability to conjure an alternative to grading scares me
because nothing is more dangerous than an idea when it's the only one we have.

Alfie Kohn (1999) writes:
There is a time to admire the grace and persuasive power of an influential idea, and there is a time to fear its hold over us. The time to worry is when the idea is so widely shared that we no longer even notice it, when it is so deeply rooted that it feels to us like plain common sense. At the point when objections are not answered anymore because they are no longer even raised, we are not in control: we do not have the idea; it has us (p. 1).

Kohn was referring to behaviorism, and yet such thoughtprovoking words can be used as a warning for any idea or practice we mindlessly implement.

Grant Wiggins (2012) reminds us that "when practice becomes unmoored from purpose, rigidity sets in." Reflecting upon one's beliefs can be a very productive use of time, and I can think of no better time to do so than when we have come to accept something as a given truth. When questions are no longer answered because questions are no longer being asked, it's time to pause and reflect. The mark of a true professional is one that spends just as much time asking why as asking how. Teachers can, and do, fill conferences with session after session on how we can better grade. However, the real issue with grading is not how but why (Kohn, 1994).

Below are three common reasons I have heard used to justify grading:

1. Motivation: Grades induce a kind of artificial, extrinsic motivation to strive for the reward of a high grade, or to avoid the punishment of a low grade. This view assumes we need grades to make kids learn.
2. Rank and Sort: Grades place students nicely on a fabricated hierarchy so that we can order those who are more worthy for post-secondary admissions and job placement. This view assumes grading indicates who is qualified and who is not.
3. Feedback: Grades provide students and parents with knowledge of student progress. This view assumes grades communicate to students and parents useful information.

While these three goals are common, using them to justify grading is problematic. That is, if we accept the above goals, grading is not necessarily the best means to promote the goals. Below, I discuss why grading doesn't "make the grade" when it comes to achieving these goals.

First, we must fully grasp the chasm that exists between what science knows about motivation and what we typically do in schools. My thinking has been greatly influenced by Alfie Kohn's Punished by Rewards: The Trouble with Gold Stars, Incentive Plans, A's, Praise and Other Bribes. The first 300 pages completes an autopsy on the idea of using extrinsic manipulators to achieve compliance, while the final 100 pages of notes, references and citations drive the final nail in the coffin. The key idea I have taken from Kohn's work is that the two different kinds of motivation, intrinsic and extrinsic, are inversely related; meaning, that if one grows, the other is likely to diminish. Because grades can only ever be experienced as a reward or punishment they, by definition, are likely to diminish a student's love for learning.

Second, when it comes to sorting, the issue isn't that we are
not sorting children well enough, rather the issue is that we spend time sorting them at all. We could be using our time and effort to help them improve. Ranking and sorting, bickering over grade inflation, rigid criteria and higher standards do little to help children become better people. As Kohn (1994) succinctly notes, "What grades offer is spurious precision, a subjective rating masquerading as an objective assessment."

Third, reducing something as messy as real learning to a symbol, letter or number provides little useful information. Grades simply cannot help a student know what they have done well or how they could get better. Moreover, several researchers note that numerical grades can have a negative impact on student learning (Black et al., 2004; Butler, 1988; Pulfrey et al., 2011). Grading is a primitive form of feedback that is at best unhelpful and at worst harmful, and in many cases it can be argued that the best kinds of feedback actually requires the absence of a grade.

Unfortunately, myths are often more satisfying than truth. In education, we are distracted by grading. We have been distracted by grades, honor rolls, achievement, winning, losing, test scores, data...the list goes on and on.

Let's refocus.
Assessment can be simplified into two steps.

1. Gather
2. Share

At first this may sound overly simplistic and rather benign, but here's the catch: you do not need to use tests to gather information about student learning, nor do you need grades to share student progress (Kohn, 2011).

So what can we do instead?
We have to abandon our mania for reducing everything to numbers. While we should have measures for learning, they do not have to be reductionist or competitive in nature, and they certainly do not need to be multiple choice.

Multiple choice exams can be very clever but they are not very authentic. You cannot gain as much insight into what a student knows and what they can do if they are not afforded the opportunity to generate a response. Students cannot construct meaning in a preconceived bubble. For the most part, multiple choice science tests end up being glorified vocabulary exams, and I am not prepared to end a year's worth of class that was filled with investigation and thoughtprovoking discussion with a simple vocabulary test. That is why I break from traditional exam format for my final exam in my middle school science course.

First off, I provide my students with zero questions. Instead, I have my students select a collection of science concepts that
we studied throughout the year and ask them to show their understanding. Because this assessment does not resemble the traditional rules of a final exam, I prefer to call it a project. To complete this project, I have had my students typically use Microsoft Publisher, but keep in mind any program that allows kids to use text, simple drawing tools and import pictures will do. Importantly, the project can be done on paper so technology needs not be a barrier (Figure 1).

This is not a "take home" project. While students can plan and collect materials outside of class, they create the project during the final exam time. My students have done this project in the gym while seated in traditional rows of desks as well as in a computer lab. When in the gym doing this by hand, I allow students to bring in a folder of their "raw materials" which could include pictures, diagrams, and paragraph excerpts. The collection of these materials and planning serve as a very purposeful way of reviewing the course concepts.

FIGURE 1
Sample student project as a final assessment.


When introducing the final project to students, I make clear that I am less interested in knowing if kids can draw the changes of state triangle and more interested in knowing what they can do with that knowledge. Rather than wasting time drawing the diagram, I would rather they spend their time sharing with me what they think of changes of state. As you can see in Stephanie's example, she brought in a picture of erosion and used it with an old saying, a description, a real life example from a previous grade and a question.

I also help the students understand that simply cutting and pasting a picture or paragraph does not show much understanding. We agree that for everything they paste on their project, they need to do something with it. This could include summarizing, explaining, sharing thoughts, feelings and opinions, making connections to other concepts, asking
questions, telling stories, describing experiments, making metaphors, labeling diagrams, remembering field trips, etc.

While some may wonder about the rigor of this final project, I concern myself more with its vigor. One year, Lizzie (a grade 8 student) was the first to finish her project. She chose to write for just over an hour. Alex was the last student to finish writing - she chose to write for just over two hours. In contrast, the other students, from other classes, who were writing a 60 question multiple choice test were all done inside of 45 minutes, and many were done inside of 30 minutes. On average, that's only 30 to 45 seconds per question!

On average, my students write for about 1.5 hours while showing their understanding for 10-20 concepts. When I gather feedback from students, I hear over and over again from them that this alternative to a multiple choice test requires far more time and effort on their behalf while actually allowing them to show their learning. Students have said to me, after writing for over an hour, that they actually had fun learning from this project. When was the last time you heard a student say that they had fun learning from a multiple choice exam?

A student's love for showing their learning is not a fire we have to light, rather it is a flame we must be careful not to extinguish. Just as curiosity is the cure for boredom, the cure for curiosity is worksheets and multiple choice tests. Only after years of schooling does children's thirst for sharing their learning dissipate, lay dormant or die.

At this point, I would wager you are wondering how I assess this project. If by assess you mean how do I calculate a mark or grade... I don't. I've been with my students for 10 months. By the time this final project comes around, I already know all I need to know to assess their learning. And because I abolished grading from my classroom years ago, I have no grades to average anyway. There is no substitute for what a teacher can see with their own eyes and hear with their own ears when observing and interacting with students while they are still learning.

However, if you mean, "How do I observe my students' learning?", then let me address that question. I work with my students while always observing and listening. I don't labor over reducing their learning to a grade or a symbol - it's simply not a good use of my time (or theirs). While it is true that this project cannot be run through the bubble-sheet machine, we must remember not to allow our misguided obsession with counting and measuring to narrow the kinds of learning opportunities we provide children - especially when one could argue that the most important kinds of learning are beyond measure.

## References

Black, P.; Harrison, C.; Lee, C.; Marshall, B.; and Wiliam, D. (2004). Working Inside the Black Box: Assessment for Learning in the Classroom. Phi Delta Kappan, 86(1), 8-21.

Butler, R. (1988). Enhancing and undermining intrinsic motivation: The effects of task-involving and ego-involving evaluation on interest and performances. British Journal of Educational Psychology, 58, 1-14.

Kohn, A. (1994). Grading: The Issue Is Not How but Why. Educational Leadership. Retrieved from http://www.alfiekohn.org/teaching/grading.htm.
Kohn, A. (1999). Punished by Rewards. The Trouble with Gold Stars, Incentive Plans, A's, Praise and other Bribes. Boston: Houghton Mifflin.

Kohn, A. (2011). The case against grades. Educational Leadership. Retrieved from http://www.alfiekohn.org/teaching/tcag.htm.

Pulfrey, C., Buch,. C., \& Butera, F. (2011). Why grades engender performance avoidance goals: the mediating role of autonomous motivation. Journal of Educational Psychology, 103, 683-700.

Wiggins, G. (2013, January 14). Avoiding stupidification: granted, but... thoughts on education by grant [Web log]. Retrieved from http://grantwiggins.wordpress.com/2013/01/14/avoidingstupidification.

Joe Bower taught Middle School language arts, science, physical education, and technology for nine years in Red Deer, Alberta, Canada. In this time Joe's teaching habits have reshaped to challenge traditional practices toward grading, homework, lesson planning, student motivation, and classroom management. He currently teaches in his district's Alternative Schools. To read more of Joe's practices visit his blog at www.joebower.org or e-mail him at joe.bower.teacher@gmail.com.

