**The Case Against Zeros in Grading**

**ASSESSMENT**

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Teachers can rethink their grading practices to make them more mathematically fair for students and allow for redemption for a missed assignment.

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Let’s say a student fails to turn something in. What grade should they receive? I have asked this question of a lot of teachers lately, and here are the most common answers I’ve gotten: “Zero.” “Nothing.” “-5.” “An F.” “A K.” What?

I’m currently in my 19th year of teaching, and my answer to this question has evolved significantly over time. I was a staunch “Give them a zero. I don’t give points for doing nothing. You earn them.” However, in the past two years, my answer has evolved to include some nuance that I believe is more mathematically fair to students and allows for redemption.

**UNDERSTAND THE GRADE BAND REALITY**

I’m a math teacher and I *love* number lines. So what does this have to do with grades? Let’s envision a number line with the traditional 0–100 grade scale on it. Way over on the right would be the A grade band (90–100). The B band would be from 80 to 90, a C from 70 to 80, and a D from 60 to 70.

When a student receives an F, that grade band doesn’t continue with that nice equal 10-point interval from 50 to 60. When we give students a zero, that zero is in grade purgatory! If we continued the equal-interval spacing of 10 points per letter, a zero would actually be a K. I think K stands for “Kill Grade.” Let me explain.

Think about a student who does consistent B (85) work. Their first two assignments are solid 85s, so the average is an 85. If this student doesn’t turn in the third assignment and receives a zero, their grade drops to an F (57). Because of that one zero, it will take that student 14 more 85s just to get their grade back to an 80.

Alexis Tamony takes a deep dive into the math of zeros in grading.

To be clear, a student could have 15 total 85s in the grade book and one missing assignment (traditional zero), and their grade would still be C because of the way that zero mathematically affects the grading system.

Our students know this. They get in a hole because of some missing work or some zeros and they inherently know that they may never be able to get out of it no matter what they do. They can consistently turn in good work, but their grade hardly improves because of the math behind the K (the zero).

**THINK PHILOSOPHICALLY TO REDEFINE ‘0’**

When I realized this, I had to philosophically understand what I wanted my grade book to be: an accurate reflection of student knowledge. I also don’t want my grading practices to be demotivating. I needed to make a change and wrap my head around “giving them something for nothing.” It seemed as wrong as the K grade. So here’s what I did: I had to reframe the concept of a zero.

If we think about grades on an equal-interval basis, each grade band is worth an equal value of 1. An F is 0, a D is 1, C is 2, B is 3, and A is 4. If we make each grade band equal, then failure isn’t disproportionately weighted. If we still have to use the 0–100 scale (which is mathematically skewed to failure), then we have to hack the traditional grade book and convert that 0–4 equal-interval scale into a 50–100 scale. Essentially, this makes 50 the new zero. We redefine the floor of our grading system to make it more mathematically accurate and less punitive. I’m not giving them something for nothing. I changed the narrative to redefine the floor at 50, so that failure isn’t worth more than success.

Let’s revisit our student who does consistent B work. The student does B-level work on two assignments and then misses one. Instead of giving that missing assignment a K (0), we give it an F (50). We use our new floor of 50 for a missing assignment. The student’s overall grade significantly drops to a 73, but it takes only four more Bs to get back into the B band. The F allows for redemption. The K doesn’t.

I spent this past summer involved in a study on Joe Feldman’s book [*Grading for Equity*](https://us.corwin.com/en-us/nam/grading-for-equity/book258205) with 55 secondary teachers and administrators in my district in Sonoma, California. One of the practices discussed in the book that is an easy one to defend and implement is this idea of redefining the zero.

Many of my experienced colleagues are rethinking their use of the zero because they’ve seen the stark reality of what it takes to overcome a K. I encourage you to think philosophically about what you want your grading practices to encourage and convey to students. Are your grades an accurate reflection of what a student knows? Do your grading practices align with your teaching philosophies? Discussing my grading practices with colleagues was one of the best professional development exercises I have undertaken in 19 years.

**PUSHBACK IS COMMON BUT MANAGEABLE**

The biggest pushback I have gotten from my colleagues has been related to the reporting of the redefined floor of 50 in the online grade book to parents and guardians. I agree that it’s confusing for a parent to see that an assignment is missing but at the same time the student received a “7/14.” The online grade book exacerbates the issue of “I don’t want to give them something for nothing.”

At my school site, there is no way around this, so we have to clearly communicate the rationale to parents with conversations or grade book comments, which is a good thing. However, this also unveils a bigger issue that can be raised with school administrators: reevaluation of our institutional systems to allow for a reimagined grading scale that is more mathematically sound and accurate.

I encourage you to find some like-minded and also some not-like-minded teachers and/or administrators and try this grading method. It makes you really have to defend your practices or develop new ones that might be contrary to what you experienced as a student.