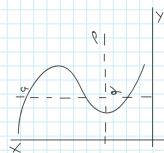


Re-Imagining Grading in Math

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$$\sin x = 2 \times 10^{-11} \times x - 46 \times 10^{-2} \times x^2$$



bit.ly/nctmgrading

$$\cos(\theta + \varphi) = \cos(\theta)\cos(\varphi) - \sin(\theta)\sin(\varphi) \quad b^c = (a+b)^c$$

Tackling Grading in Math

01

Why we need to look at our grading practices as math teachers

$$x = 1 \quad \sin 0$$

02

How to take a few small steps towards more consistent grading practices

$$a^2 + b^2 = c^2$$

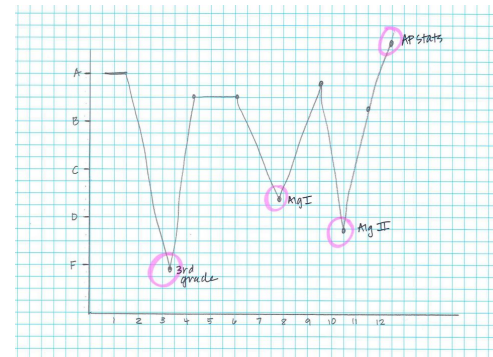
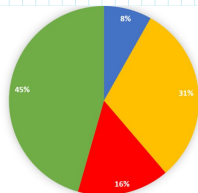
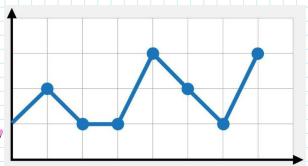
$$(y_2 - y_1)^2 + (x_2 - x_1)^2 = c^2$$

03

Ideas for moving forward and lots of resources to check out

$$\frac{1}{a} = \frac{x}{a}$$

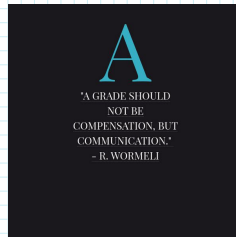
What would it look like if I asked you to draw a representation of your grades in math from K -12?



Natalie's Math Journey

Talking about Grading

- Grading is subjective
- Grading is personal
- Grades are used for communication
- Grading is often connected to our beliefs about teaching and learning



01

Why consider grading practices?

- **Consistency**
 - Same course, different grading schemas from teacher to teacher
- **Equity**
 - What is included in a grade; lifting the “veil” of grading
- **Learning gaps**
 - Students need additional support returning from 2020-2022 school years
- **Disconnect between grades and assessments**
 - End of year scores/assessments do not match student's grades
- **Student stress**
 - Student focus on collecting points vs learning

$$\sin x = 2 \times \tan x - \tan^2 x$$

$$f(x) = \frac{1}{2\pi i} \oint \frac{f(z)}{z-x} dz$$

“The way we grade should motivate students to achieve success, support a growth mindset, and give students opportunities for redemption.”

Joe Feldman, *Grading for Equity*



$$\cos(\theta + \varphi) = \cos(\theta)\cos(\varphi) - \sin(\theta)\sin(\varphi) \quad b_0^2 = (a+b)^2$$

02

Where to Start

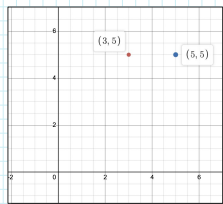
- **Alignment**
 - Between teachers, PLCs, the department, the school, the division?
- **Focus on grading what students Know, Understand, and can Do**
 - Eliminate extraneous factors in grades (behavior, extra credit, etc.)
- **Let grades represent hope**
 - Take zeros out of grades; don't let students opt out of learning
 - Allow retakes and additional time to continue learning

2

Standards-Based Grading

What if we scored students based on their performance towards the standards?

The premise is that if we know exactly where students are in the progression of learning, we can provide them corrective feedback, in order to move them all towards the goal.



Example: Middle School

Learning Goal: Solve two-step linear equations in one variable. (7.12)

Success Criteria:

- I can solve one-step linear equations in one variable.
- I can apply properties of real numbers and properties of equality to solve two-step linear equations in one variable.
- I can confirm algebraic solutions to linear equations in one variable

Rubric:

4	Conceptual understanding/Mastery of skills
3	Some errors - needs corrective feedback
2	Many errors - needs instruction
1	Incomplete - needs additional instruction
0	No attempt

03

Resources for Inspiration

Grading Experts

- Rick Wormeli
 - [Accountability](#)
- Ken O'Connor
 - [A Repair Kit for Grading](#)
- Dr. Tom Guskey
 - [Zero Alternatives](#)
- Dr. Susan Brookhart
 - [8 Essential Principles for Improving Grading](#)
- Joe Feldman
 - [Beyond Grading for Equity](#)

Articles, videos, websites to explore

- [ALL Things Standards-Based Grading](#)
- [Re-learn and Reassess- Practical Tips](#)
- [Are all zeros created equally?](#)
- [Reporting Student Learning](#) (Wormeli & O'Connor)
- [The Evidence-Backed Grader](#)