THE EFFECTS OF STANDARDS-BASED GRADING IN THE MIDDLE SCHOOL SCIENCE CLASSROOM

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INTRODUCTION

At the beginning of my career, I found my traditional grading system unsatisfying. Assigning a point value to assignments and assessments and calculating a student's grade from the average points earned felt subjective, difficult to keep consistent for each student level, & the system lacked communication about what the student really knows about science. Learning about the foundations of standards-based grading (SBG) opened my eyes to a potential solution to my traditional grading system issues.

WHAT SBG LOOKS LIKE:

- ✓Defined proficiency scale rubrics rather than subjective points earned
- ✓Assignments aligned to mastery of learning goals written from standards
- ✓A dynamic grade book allows for redoing assignments and tests as student learning increases
- ✓Students work to learn rather than working for an "A"
- ✓Students are not penalized for poor performance during the learning process
- ✓Grade reflects what the student knows, not participation, behavior, or attendance

METHODOLOGY

How does standards-based grading affect:	Data Source 1	Data Source 2	Data Source 3
Comprehension	Thoughts on Grading Survey	Learning goals mastered	Science Content Pre/Posttest
Attitude towards grading	Thoughts on Grading Survey	Open ended survey questions	Student Interviews
Motivation	Thoughts on Grading Survey	Open ended survey questions	Student Interviews

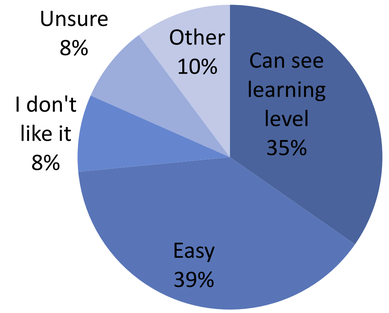
This study occurred in a 7th grade life science class with 56 students. Assignments, labs and activities were aligned with defined learning goals for each standard and scored with a proficiency scale rubric. Students' grades were determined from both the proficiency levels reached for each learning goal and performance on the summative assessment for each learning goal. Students were given many opportunities during the learning process to improve their proficiency level.

DATA ANALYSIS

Benefits of SBG

- ✓68% of students reported SBG more accurately represents their knowledge of science
- ✓65% of students said they prefer using rubrics when being graded
- ✓74% of students reported using rubrics help them learn science better
- ✓More accurate alignment of curriculum and assessment to standards

What Students Like About SBG



"(SBG) truly shows intelligence on the subject rather than just getting a grade out of 10 points..."

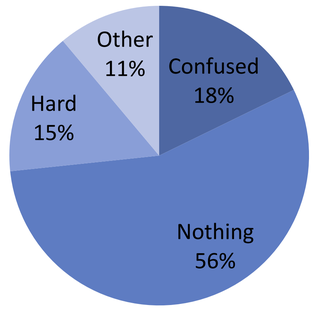
"(SBG) shows what I need to practice on..."

Quotes from 7th Grade Students

Drawbacks of SBG

- ✓The increase in student comprehension, attitude towards grading, and motivation was not statistically significant
- ✓District wide grade book system is not SBG friendly
- ✓Difficult to write clear, measurable, and defined proficiency levels for learning goals

What Students Dislike About SBG



DISCUSSION

In the end, grading is still grading. No matter the grading system, there will always be discussions and questions about the subjectivity, accuracy, and necessity of giving a grade. Despite minimal statistical evidence, I believe ideas of SBG will be useful in the future of my classroom. Classroom research has caused me to reflect on my teaching practices and raised a desire to continually improve.