## **OBJECTIVE BASED GRADING**

### What Student Needs or Challenges Did You Identify? What Changes Did I Make?

During this year's Maricopa Student Success Conference, I attended a session titled "Fostering an Environment of Student Learning through Self-Assessment and Reflection." I was genuinely inspired by the firsthand experiences shared by a professor regarding the implementation of Objective Based Grading and the positive outcomes observed among students.

Earlier that Fall, I had reviewed the syllabus of my evaluator, Sarah Lockhart, and noted her use of Objective Based Grading, although I was not very familiar with the approach. After gaining insights during the Fall Conference, I felt motivated to reach out to Sarah again for further details on how she integrated this method into her math classes. The conference emphasized that initial attempts may not be perfect, but it is ok to learn and adapt as we implement new strategies. The professor noted that after our first experiences, we would have a clearer understanding of the necessary adjustments, enabling us to refine our approach with each semester. This encouragement inspired me to take the plunge.

## What Did I Change?

1. Two Scheduled In-Class Mastery Checks as a Vehicle for Objective Based Grading vs. Unit Test

With Sarah's guidance on her implementation of Objective Based Grading, I decided to adopt her methods for my own classes. I implemented a system that included a smaller Mastery Check on concepts, followed by a larger Mastery Check at the end of each unit providing students the option to come outside of class time to take additional attempts. This structure allowed students the time to focus on identifying the concepts and honing the skills needed for mastery. Each student required differing amounts of time. Additionally, it incorporated one automatic retake during class time for students to demonstrate mastery. In the Fall semester, I had only administered one large unit test and required students to come in after class for retakes.

- $2. \ \ \, \textbf{Scale of 0 to 4 on Each Tested Objective vs. One Grade on Unit Test}$ 
  - I transitioned from awarding an overall percentage for the unit test to providing individual grades for each concept on a scale from 0-4, with 4 representing the highest level of mastery. I also allowed students to retake smaller Mastery Checks rather than requiring them to complete an entire Unit test.
- 3. Paper Tests with Greater Emphasis on Grading the Objective vs. "Did you get the right answer?"

In my grading, I placed a stronger emphasis on "seeing" the students progress towards the objective itself. If a small arithmetic error occurred but the logic and application of the objective were sound, I made only minor deductions instead of assigning a zero or significantly lower points. This also meant that I graded all Mastery Checks by hand and administered tests on paper rather

than going through the MOER system. I also kept tests shorter so I could give each question the attention to detail that was needed.

### 4. Guiding Students Through Self-Reflective Questions

I frequently guided students in analyzing their Mastery Check scores by posing reflective questions for them to consider, such as:

- What mastery checks did you excel in?
- Which areas need improvement?
- What do you need to know to master those concepts?
- What tools and resources could you utilize to enhance your understanding?
- Do you need to seek help? From a colleague? From the instructor? From tutoring?
- What additional steps do you need to take to reach your desired score?

I emphasized that making mistakes and learning through the process of improving from one score to another is an integral part of education. As long as students demonstrated improvement, I encouraged them to see this as being on the right path. I urged them to persist in their efforts, analyze their strengths and weaknesses in each new attempt, and continue planning how to achieve their goals.

# What happened as the result?

#### STUDENT SCORES & IMPROVEMENT DUE TO STANDARDS BASED GRADING

	Average Initial Score	Student Improv.	Sum of Class Percent	Retakes Outside of Class
	65%	0% - 9%	26%	103
S 1		10% -19%	37%	
AS		20% -29%	15%	
귱		30% - 39%	<b>7</b> %	
	83%	40% - 50%	11%	3.96
	Average Final Score	Grand Total	96%	Average Retakes / Stud.

CLASS 2	Average Initial Score	Improvement *	Sum of Class Percent	Retakes Outside of Class
	<b>76</b> %	0% - 9%	44%	65
		10% -19%	16%	
		20% -29%	20%	
		30% - 39%	8%	
	92%	40% - 50%	8%	2.6
	Average Final Score	Grand Total	96%	Average Retakes / Stud.

The number of students self-directing their study efforts to improve their Objective scores rose dramatically compared to the Fall semester. The number of students coming after class to retake assessments beyond the two in-class Mastery Checks in both classes saw nearly a 300% increase.

The average student score increased by 18% in Class 1, while Class 2 experienced a 16% rise. Notably, the most significant grade changes among students included:

- From 41% to 86%
- From 26% to 75%
- From 48% to 96%
- From 50% to 98%

I cannot emphasize enough how this process has empowered students to take charge of their learning and improvement. It was truly inspiring to witness.

Based on my personal observations during class, Objective Based Grading also enhanced student retention and allowed those who had previously struggled with math to focus on and navigate around their learning difficulties.

### COMMENTS THAT REPRESENT STUDENT OPINIONS ON OBG SURVEY CONDUCTED

"I feel as if SBG does change my view of my test scores as they are broken up instead of lumped together. I feel as if I have improved since I'm able to focus on the specific concepts I need to study. Without it, I would feel much more in the dark and confused."

"I feel much better about myself. This has affected me by pushing me to master each subtest. Seeing Mastery tells me what I need to work on. Please continue using SBG."

"It doesn't affect me. I haven't seen change."

"I don't think it helps me any more than regular grading strategies."

Interestingly, these comments are split roughly 50/50 within the classes. Even though half of the students do not perceive Objective Based Grading as beneficial, I have noticed a significant increase in the number of students taking the initiative to improve their grades compared to the Fall semester. This suggests that some students may not recognize the positive changes occurring as a result of this approach. Overall the average final student grade has increase by about 10% when compared to Fall.

### **FINAL THOUGHTS**

I firmly believe that Objective Based Grading has transformed the classroom atmosphere for students. It has significantly impacted my teaching, and I cannot imagine going back to my previous methods. Even if students may not recognize the positive results, I certainly do. Here are some areas I need and want to explore further:

- 1. I AM SO VERY GREATFUL FOR THE STUDENT SUCCESS CONFERENCE WHERE I HAVE ACCESS TO IDEAS LIKE THESE. They make me better.
- J. MAUGHAN (mathematics) Objective Based Grading Spring 2025

### 2. Increase the Availability of Test Versions

I plan to develop more test versions that are ready to print, allowing me to keep pace with student growth and retakes. While I didn't anticipate such a significant level of positive change and student motivation, I see the need for this adjustment. Not many are needed, but for my first year I often found myself creating additional versions in short amount time.

## 3. Enhance Visibility of the Mastery Check Folder in MOER

I realized that the Mastery Check folder was not visible in MOER, which led to student confusion regarding the specific objectives of each question if they misplaced their Mastery Check paper. I had even posted the general locations the objects were located in MOER, but the students could not see this.

## 4. Emphasize Self-Analysis in Journal Writing

I want to place a greater emphasis on self-analysis in journal writing, encouraging students to reflect on their learning experiences more deeply. I feel like I could have done more.