



# Standards-Based Grading (SBG) and Achievement

A quantitative comparison of grade data as a result of an SBG initiative at the secondary level

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*"Although I had previously attributed schools' achievement and opportunity gaps of race and income entirely to unaddressed needs in our instruction and curriculum, limited cultural understanding, or a weakness in resolve, I came to realize that our common grading practice makes us active accomplices in perpetuating these gaps. The ways we grade disproportionately favor students with privilege and harm students with less privilege; students of color, from low-income families, who receive special education services, and English learners."*  
-Joe Feldman, 2019, p. xxii

## The Problem

- Grades awarded to students hold significant importance in their lives; they often dictate a student's participation in specialized classes, athletics, scholarships, college admissions, and ability to apply for a work permit. Car insurance may even cost more for students with lower GPAs, all of which impact individual and family incomes and expenses (Feldman, 2019).
- Despite the significance of grades in students' lives, the traditional ways in which they are awarded is subjective and inconsistent; because grades serve multiple purposes and are unique to each course and teacher, grades awarded vary broadly across classrooms, districts, and states to classroom and teacher to teacher (Peters et al., 2017; Pollio & Hochbein, 2015).
- The traditional grading system in America is over a century old and lacks a body of supporting research to defend its merit (Marzano, 2000; Peters et al., 2017).
- Central issues within the traditional grading systems arise because teachers evaluate students on criteria that are non-academic, such as the teacher's perception of compliance, participation, effort, and discipline (Feldman, 2019; Knight & Cooper, 2018; Townsley & Varga, 2018).
- Evaluating students on non-academic criteria negatively impacts marginalized students of color, since these grades are often influenced by a teacher's implicit or unconscious bias (Feldman, 2019; Hammond, 2015).
- Therefore, traditional assessment practices within the classroom may inadvertently broaden academic opportunity gaps between dominant and non-dominant student groups.
- The standards-based grading movement (SBG) arose in reaction to traditional grading practices. As opposed to a traditional points-based grading system, the SBG system aims to communicate how well students have learned specific educational standards, as opposed to whether or not they have completed homework, participated sufficiently, or received extra credit (Brookhart, 2011 as cited in Townsley & Varga, 2018). SBG addresses theories on culturally responsive teaching practices and implicit bias by attempting to diminish the chances of teachers' interjecting their own implicit biases within grades (Feldman, 2019).
- Proponents of SBG hypothesize that, if implemented with fidelity, SBG can help to reduce achievement gaps seen across race, gender, and socioeconomic status (SES) (Feldman, 2019; Reeves, 2004).
- The problem addressed in the present study explores whether or not SBG is, in fact, a more equitable grading system than a traditional, points-based, system.

## The Purpose of the Study

The purpose of this study is to examine the impacts of an SBG initiative on the socioeconomic status (SES) achievement gap and the gender achievement gap at diverse high schools in the Central Coast of California. SBG initiatives are surprisingly under researched; as districts across the nation begin to upend assessment practices that communities know and love, this study may assist district leaders and educators in determining whether or not a shift to SBG is worth the effort and investment.

## Research Questions

- How does an SBG initiative at the secondary level impact academic achievement gaps among socioeconomic status (SES)?
- How does an SBG initiative at the secondary level impact academic achievement gaps among gender?

## Methodology

This is a non-experimental quantitative comparative study that compares pre-existing grade data with current levels of achievement. For the purpose of this study, the dominant student groups are females and non-FRPL students and the non-dominant student groups are males and FRPL students. The following statistical analysis was used to sort data:

- The amount of As, Ds, and Fs were counted and sorted by dominant and non-dominant sub-groups.
- The percentage of students who received As, Ds, and Fs was found for the dominant and non-dominant sub-groups.
- The percentage of difference between the amount of As, Ds, and Fs awarded to the non-dominant group determined the academic achievement gap between the two groups for each school year.

The academic achievement gaps among the whole school was identified as an expected value to compare with the sample size. The sample size consisted of teachers who fully-transitioned from traditional grading to SBG from the 2019-2020 school year to the 2021-2022 school year.

Then, the percent of change was compared between the student groups in order to determine if there is a reduction in the achievement gaps for both the whole school and the student body of the teacher sample.

Finally, the difference in the academic achievement gaps for the whole school was compared with the difference in the academic achievement gaps for the teacher sample size in order to determine any disparities in grades awarded by teachers who fully transitioned from traditional grading to SBG.

## Results

### THE SBG INITIATIVE SIGNIFICANTLY IMPROVED THE SES ACHIEVEMENT GAP

- The whole school saw a 14.77% decrease in the academic achievement gap among As conferred to non-FRPL and FRPL students and an 8.3% decrease in Ds and Fs achievement gap seen among non-FRPL and FRPL students. The SBG initiative essentially eliminated the academic achievement gap for low-income students.
- The student body of the sample size saw a 13.74% reduction in the gap among As awarded and a 7.53% decrease in failing grades awarded between non-FRPL and FRPL designated student, lowering the achievement gap to 1.86% post the initiative.

Percentage of "Ds & Fs" Grades Awarded 2019-2020 (before SBG initiative) vs. 2021-2022 (after SBG initiative) for SES					
Whole School					
Students	2019-2020 Fall Semester	Achievement Gap 2019-2020	2021-2022 Fall Semester	Achievement Gap 2021-2022	Percentage Difference
Non-FRPL	7.80%	8.8% points	3.70%	0.50%	8.3% decrease
FRPL	15.50%		4.20%		
Teacher Sample Size (Fully Transitioned from Traditional to SBG)					
Students	2019-2020 Fall Semester	Achievement Gap 2019-2020	2021-2022 Fall Semester	Achievement Gap 2021-2022	Percentage Difference
Non-FRPL	6.82%	8.14% points	3.46%	.61% points	7.53% decrease
FRPL	14.96%		4.07%		

### THE SBG INITIATIVE SIGNIFICANTLY IMPROVED THE GENDER ACHIEVEMENT GAP

- The whole school saw a 6.7% decrease in academic achievement among As conferred to females and males and 5.3% decrease in the academic achievement gap among failing grades. The SBG initiative essentially eliminated the academic achievement gap among gender for the whole school.
- The student body of the sample size saw a .17% increase in the amount of As awarded to females over males, broadening the achievement gap by a slim margin in terms of high achievement. However, the overall D and F achievement gap was reduced by 3.14%, resulting in a 1.86% academic achievement gap among gender for the 2021-2022 school year.

Percentage of "D & F" Grades Awarded 2019-2020 (before SBG initiative) vs. 2021-2022 (after SBG initiative)					
Whole School					
Students	2019-2020 Fall Semester	Achievement Gap 2019-2020	2021-2022 Fall Semester	Achievement Gap 2021-2022	Percentage Difference
Female	7.20%	5.70%	3.70%	0.40%	5.3% decrease
Male	12.90%		4.10%		
Teacher Sample Size (Fully Transitioned from Traditional to SBG)					
Students	2019-2020 Fall Semester	Achievement Gap 2019-2020	2021-2022 Fall Semester	Achievement Gap 2021-2022	Percentage Difference
Female	6.80%	5.00%	2.82%	1.86%	3.14% decrease
Male	11.80%		4.68%		

## Implications

- The SBG initiative significantly reduced academic achievement gaps at the secondary level, revealing that SBG is a more equitable model of assessment that benefits non-dominant student groups.
- The teacher sample size did not meet nor succeed the whole school results, revealing that teachers' perceptions of SBG may impact their implementation of it.