

New for WCCUSD

2017-18 Gr. 3-8 Math Interim Assessment Blocks

**Presented to the Board of Education
West Contra Costa Unified School District**

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Research, Accountability, Assessment and Data**



What are the Interim Assessment Blocks?

The **Smarter Balanced Interim Assessment Blocks (IABs)** are short, focused sets or blocks of items that measure one or more SBAC assessment targets. Results from the interim assessments provide information about a student's strengths or needs in relation to the Common Core State Standards (CCSS).

- Uses the same assessment targets, by grade level, as the SBAC summative blueprints
- Provides information about a student's strengths and needs related to the assessment targets
- Offers varied blocks by grade level and subject area.

Mathematics Interim Assessment Blocks

Grade 3	Grade 4	Grade 5
Operations and Algebraic Thinking	Operations and Algebraic Thinking	Operations and Algebraic Thinking
Number and Operations – Fractions	Number and Operations – Fractions	Number and Operations – Fractions
Measurement and Data	Measurement and Data	Measurement and Data
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Geometry*	Geometry	Geometry
Mathematics Performance Task	Mathematics Performance Task	Mathematics Performance Task

Grade 6	Grade 7	Grade 8
Ratios and Proportional Relationships	Ratio and Proportional Relationships	Expressions & Equations I
The Number System	The Number System	Expressions & Equations II (with Prob/Stat)
Expressions and Equations	Expressions and Equations	The Number System*
Geometry	Geometry	Functions
Statistics and Probability	Statistics and Probability	Geometry
Mathematics Performance Task	Mathematics Performance Task	Mathematics Performance Task

*New Assessments in 2017-2018

What did we Assess?

We selected two Blocks to be administered (at each grade level 3-8) that are aligned with the Concepts and Procedures Claim. Concepts and Procedures were our weakest area on the SBAC.

Grade	Fall Benchmark IAB 1	Fall Benchmark IAB 2
Grade 3	Numbers and Operations in Base 10	Operations and Algebraic Thinking
Grade 4	Numbers and Operations in Base 10	Operations and Algebraic Thinking
Grade 5	Numbers and Operations in Base 10	Operations and Algebraic Thinking
Grade 6	Number System	Expressions and Equations
Grade 7	Number System	Expressions and Equations
Grade 8	Number System	Expressions and Equations 1

What Did Each Assessment Test?

Number and Operations in Base Ten (Grades 3-5)

The standards for Number and Operations in base ten require students to be able to fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Operations and Algebraic Thinking (Grades 3-5)

The standards for Operations and Algebraic Thinking require students to be able to identify arithmetic patterns, and explain them using properties of operations. (For example, observe that 4 times a number is always even)

The Number System (Grades 6-8)

The standards for the number system include applying and extending understanding of operations with multiplication, division, fractions and rational numbers.

Expressions and Equations (Grades 6-8)

The standards for Expressions and Equations require students to solve real-life and mathematical problems using numerical and algebraic expressions and equations that may include variables to represent quantities.

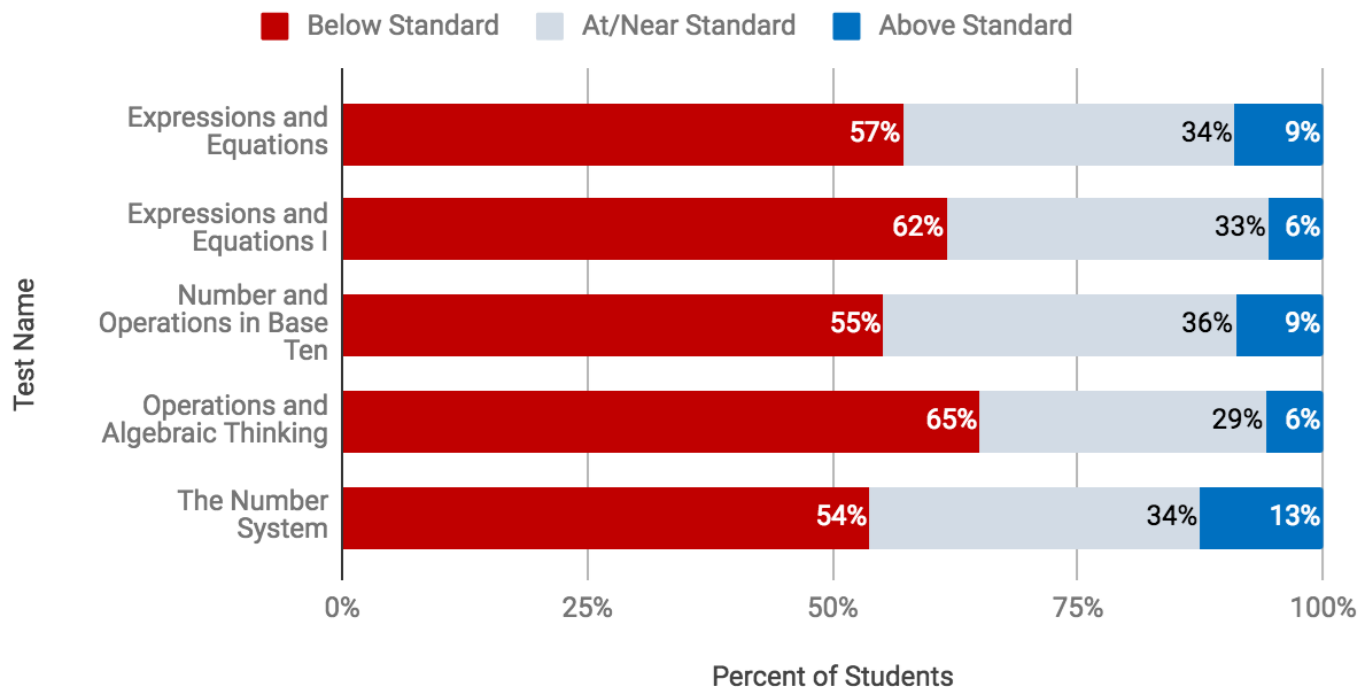
Participation

Grade	Assessment	# of Students	% of Students
3	Number and Operations in Base Ten	2071	91%
	Operations and Algebraic Thinking	1659	73%
4	Number and Operations in Base Ten	2150	91%
	Operations and Algebraic Thinking	1650	71%
5	Number and Operations in Base Ten	2103	91%
	Operations and Algebraic Thinking	1668	73%
6	Expressions and Equations	1638	78%
	The Number System	1418	68%
7	Expressions and Equations	1439	77%
	The Number System	1315	70%
8	Expressions and Equations I	1452	76%
	The Number System	1152	60%

- We are not yet at full participation on these assessments yet.
- Most schools had participation rates above 85%, but a few schools or classrooms did not administer one or more assessments, lowering overall rates for that assessment.

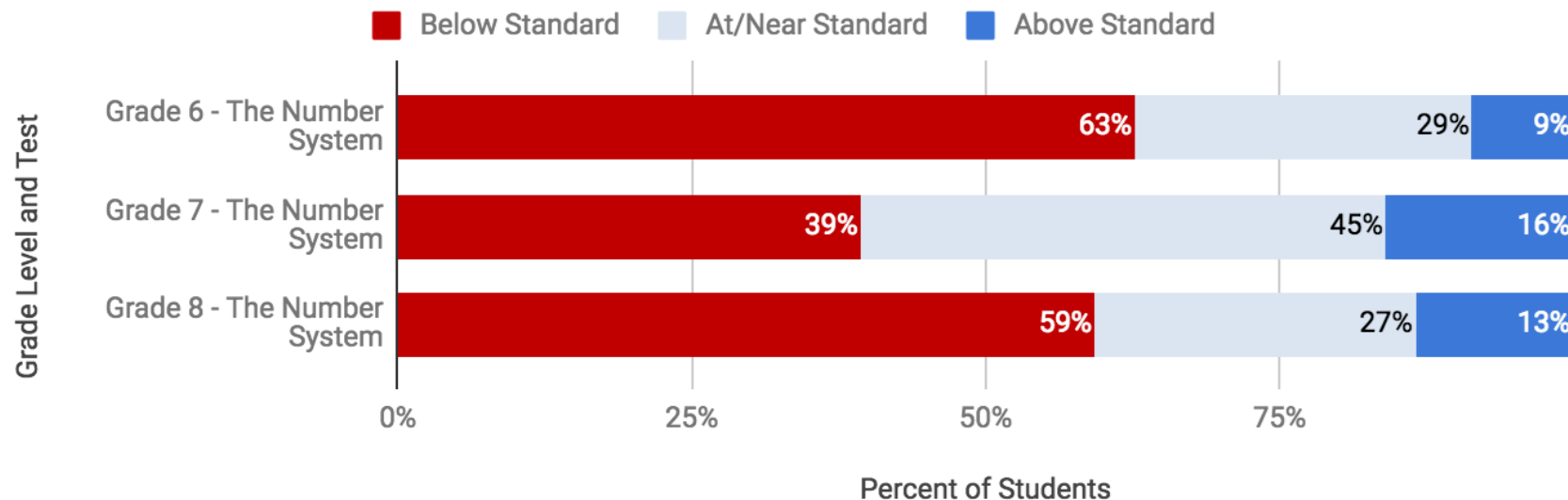
Fall 2017 IAB Math Results by Test

Grades 3-8
n = 19,715



- Looking at overall target areas, our stronger areas are number and operations in base ten and the number system.

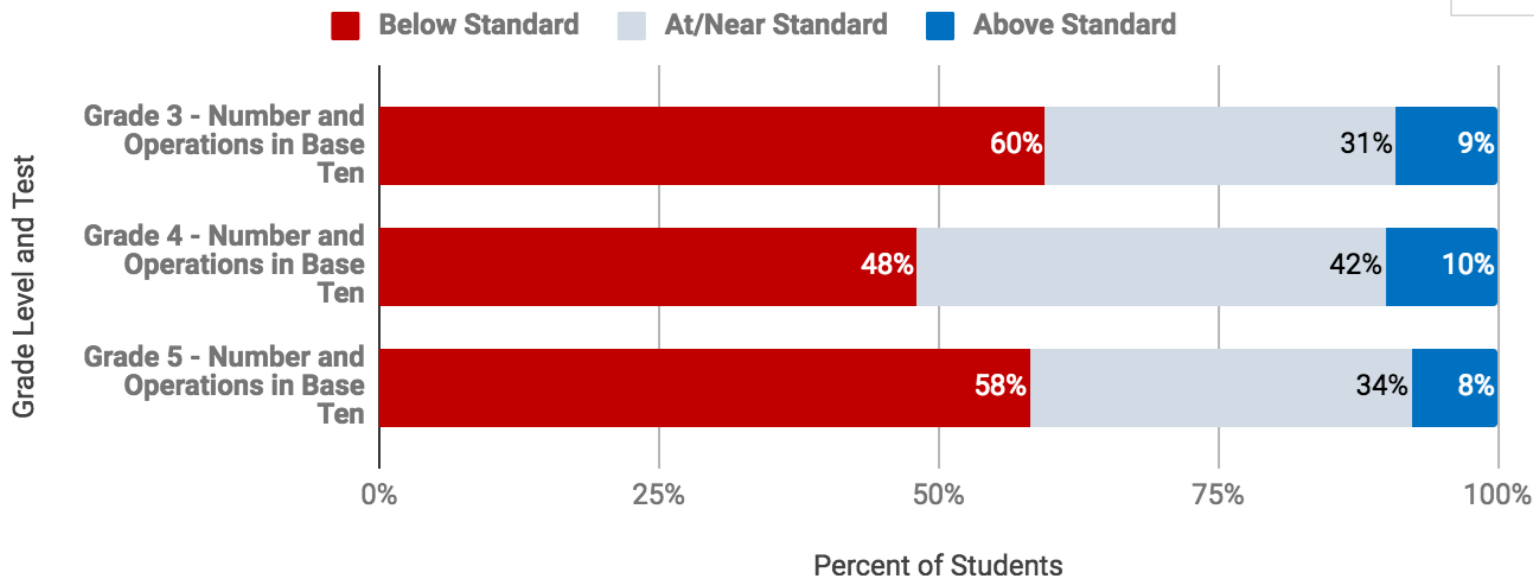
Fall 2017 IAB Math Results by Grade Level Test



- The Number System was our overall strongest target area.
- Seventh grade students performed significantly higher than sixth and eighth grade on this assessment.

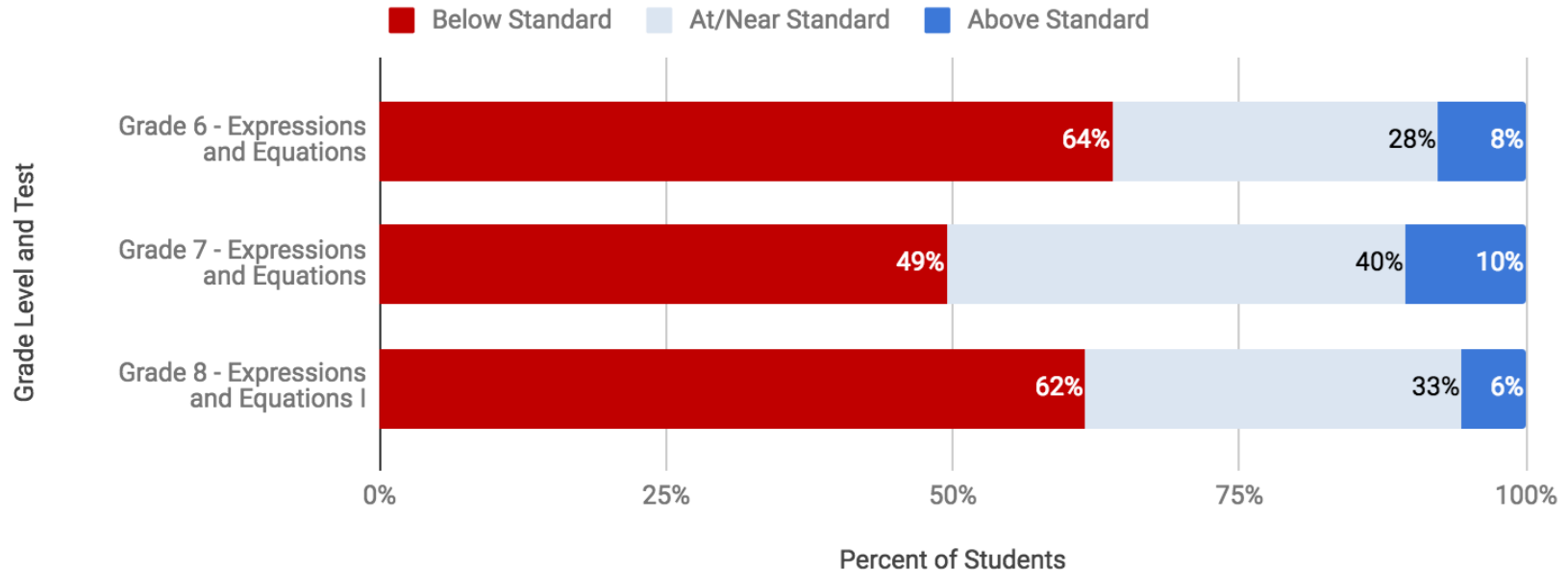
Fall 2017 IAB Math Results by Grade Level Test

Grades 3,4,5
n = 6,324



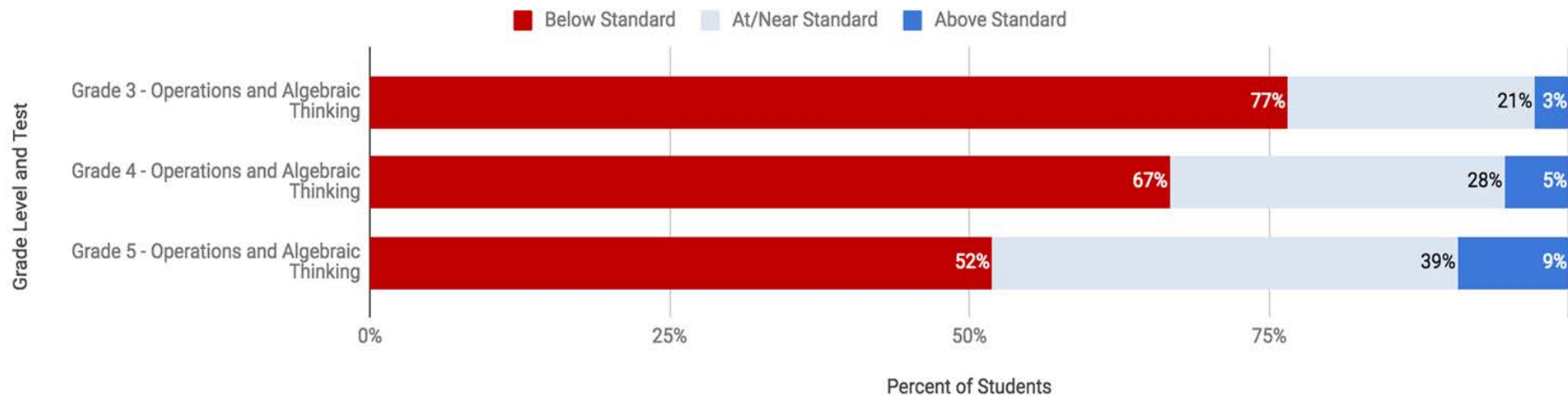
- Number and Operations in Base Ten was our second strongest target area.
- Fourth grade students performed better than third and fifth in Number and Operations in Base Ten.

Fall 2017 IAB Math Results by Grade Level Test



- Expressions and Equations was our third strongest target area.
- Seventh grade students outperformed sixth and eighth grade students in this area.

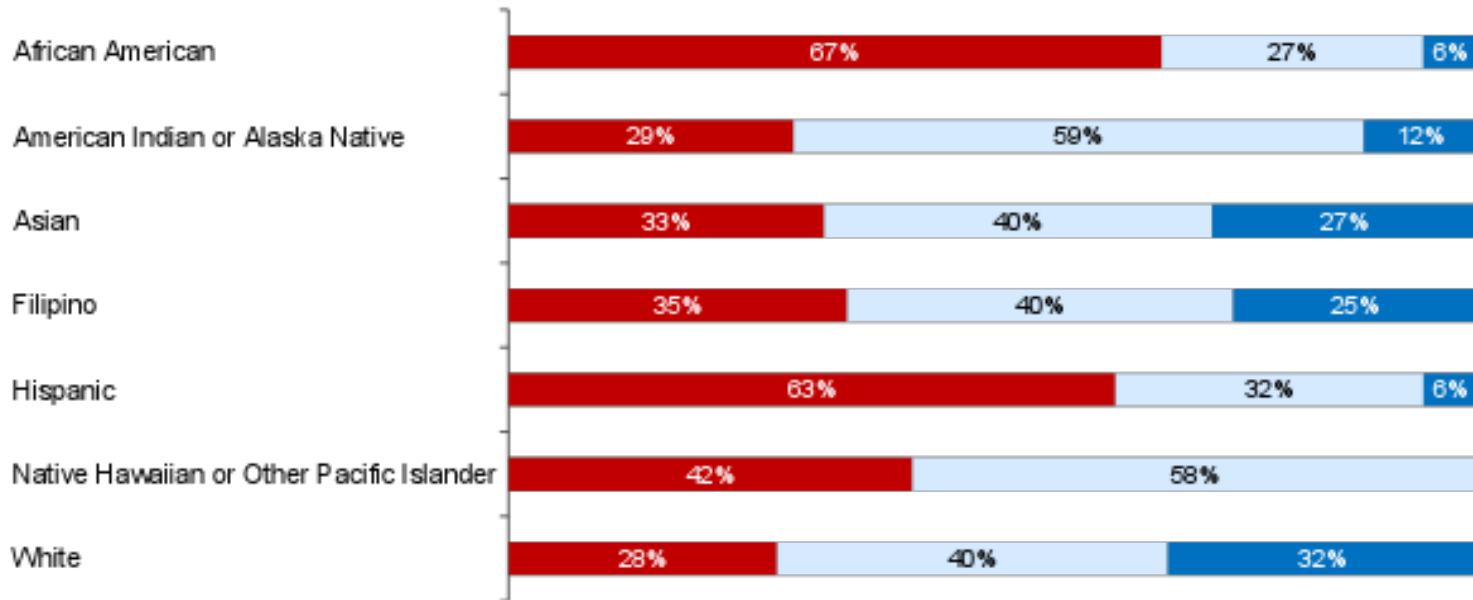
Fall 2017 IAB Math Results by Grade Level Test



- Operations and Algebraic Thinking was our lowest performing target area.
- Fifth grade students significantly outperformed our third and fourth grade students in this area.

The Number System Results by Ethnicity

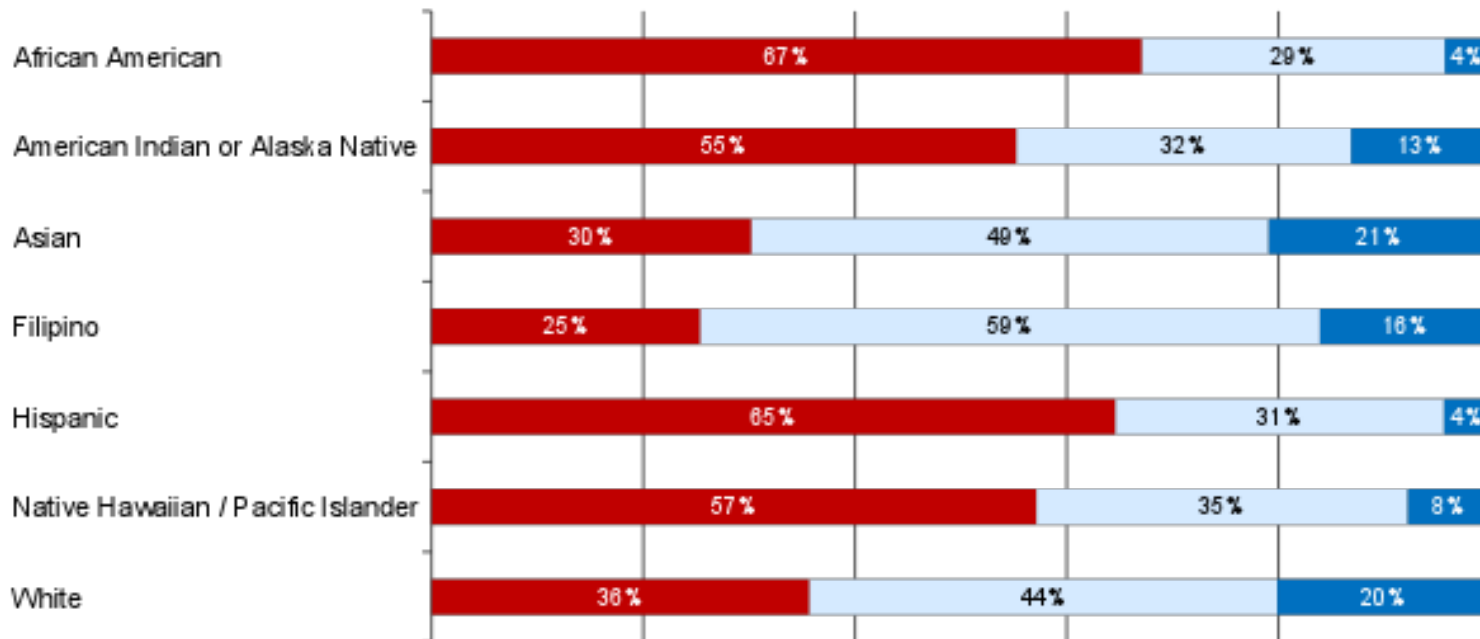
Below Standard At/Near Standard Above Standard



- Looking at each target area by ethnicity, we continue to see an achievement gap with African American and Hispanic/Latino students having the lowest performance.

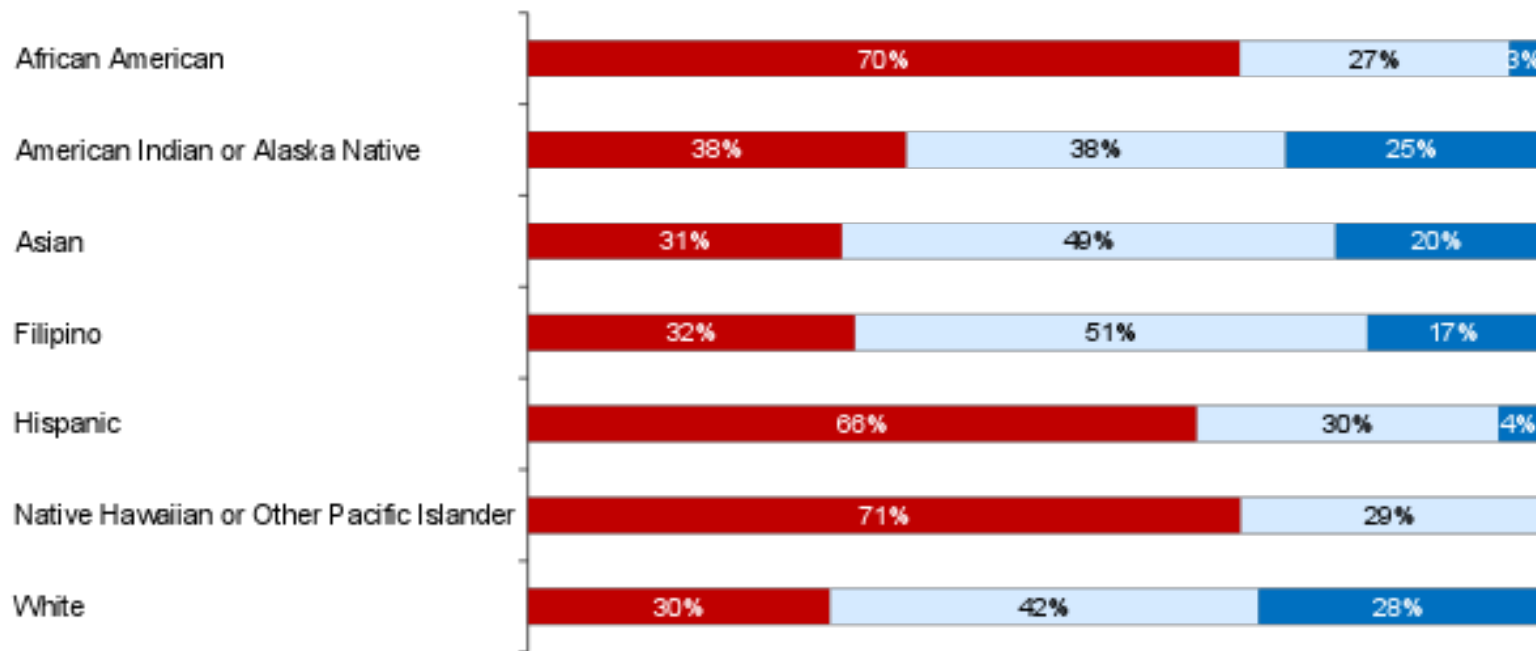
Number & Operations in Base Ten Results by Ethnicity

■ Below Standard ■ At/Near Standard ■ Above Standard



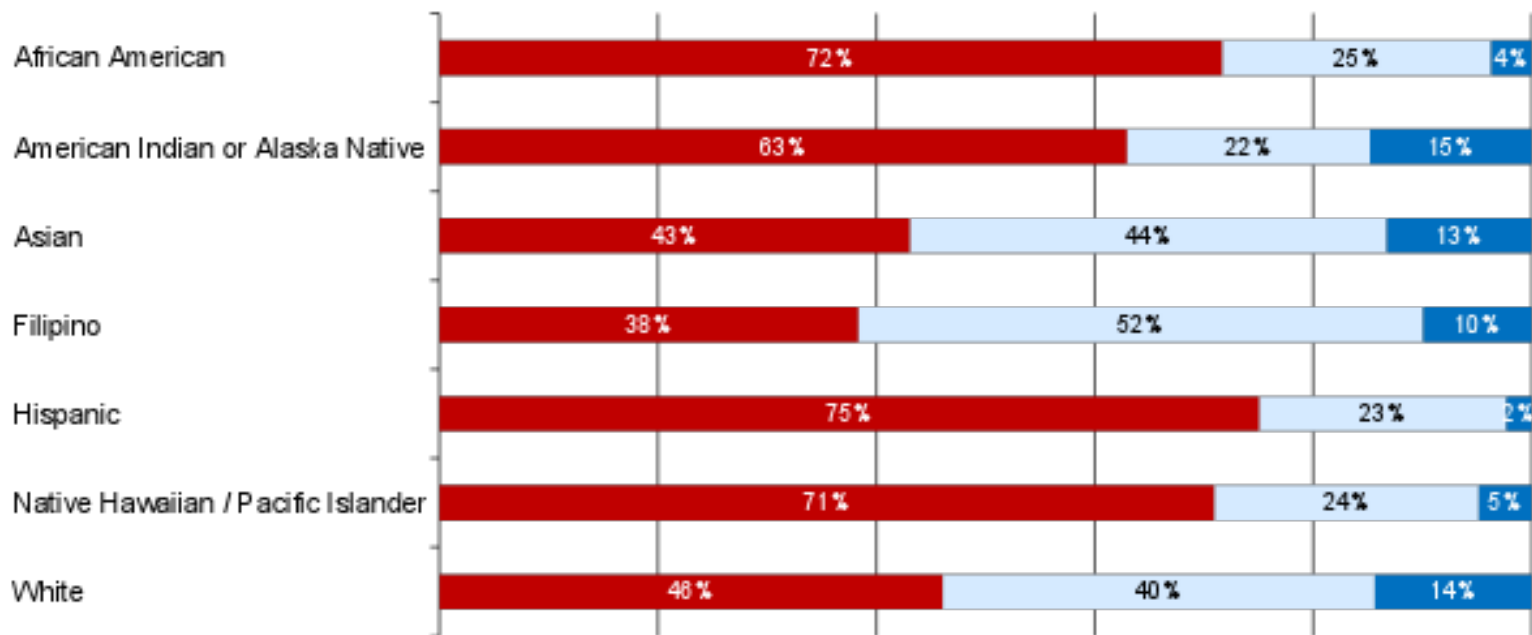
Expressions & Equations Results by Ethnicity

■ Below Standard ■ At/Near Standard ■ Above Standard



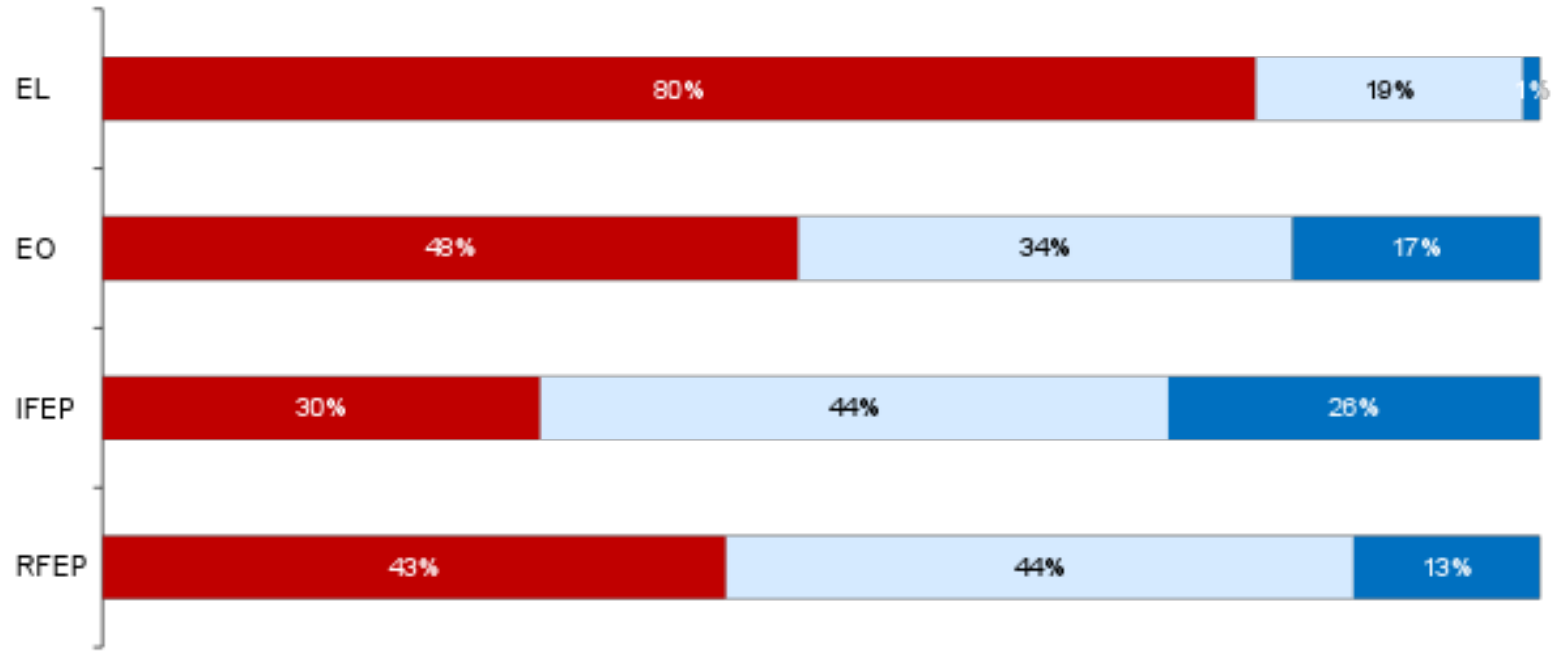
Operations & Algebraic Thinking Results by Ethnicity

Below Standard At/Near Standard Above Standard



The Number System Results by English Proficiency

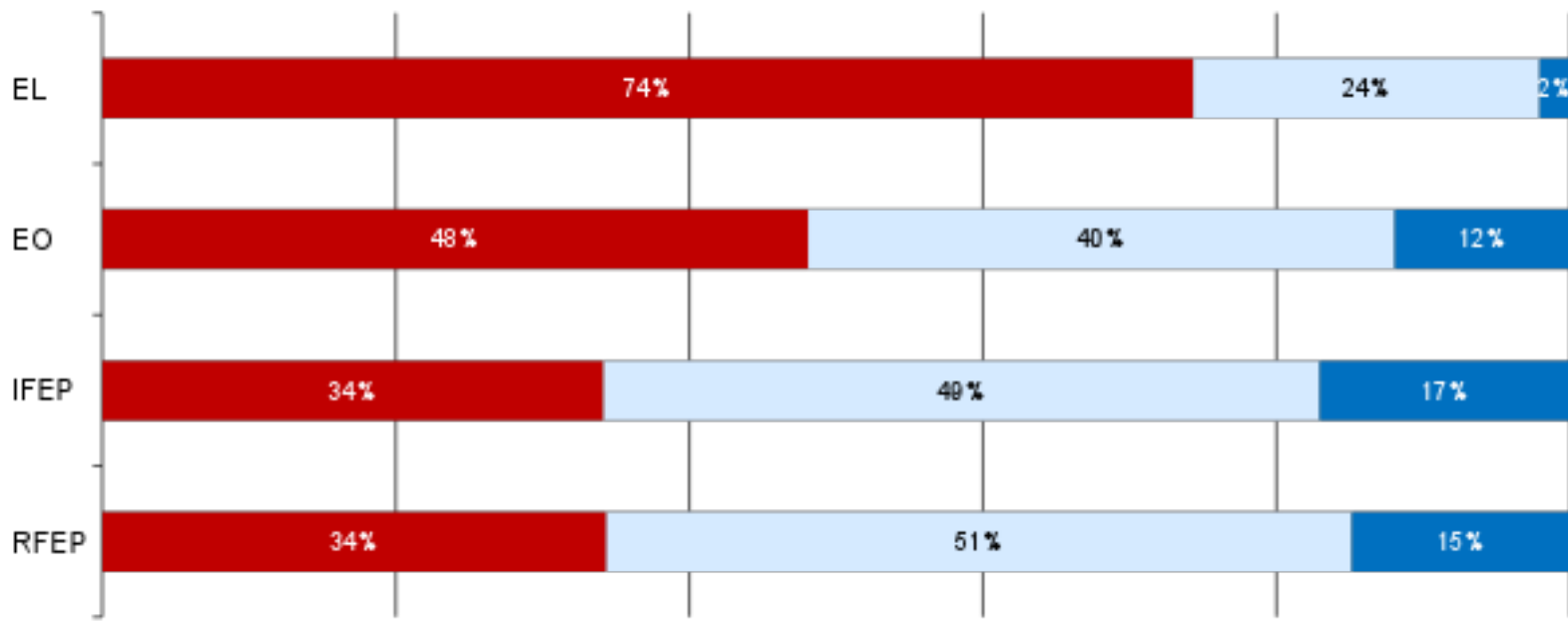
■ Below Standard ■ At/Near Standard ■ Above Standard



- When we look at performance by English proficiency, our English Learners have the overall lowest performance, while Redesignated students perform significantly better.

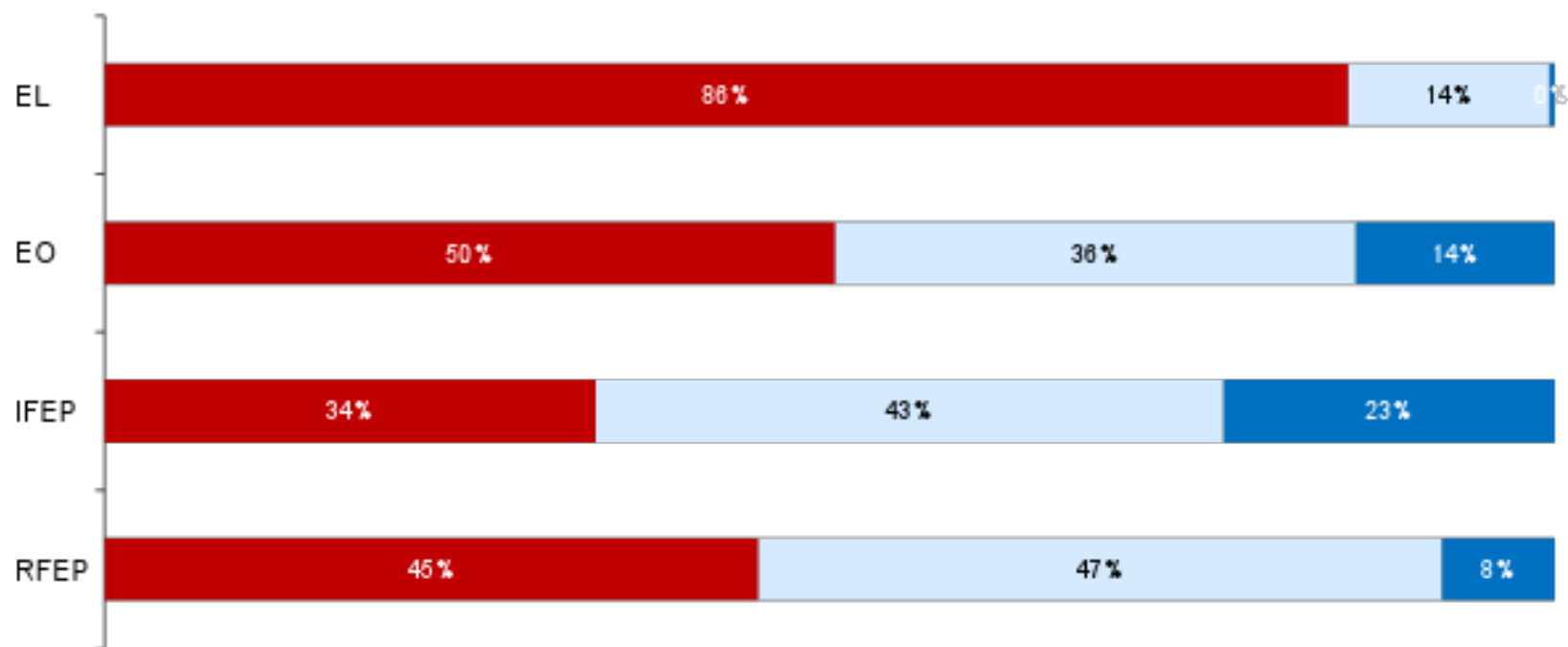
Number & Operations in Base Ten Results by English Proficiency

■ Below Standard ■ At/Near Standard ■ Above Standard



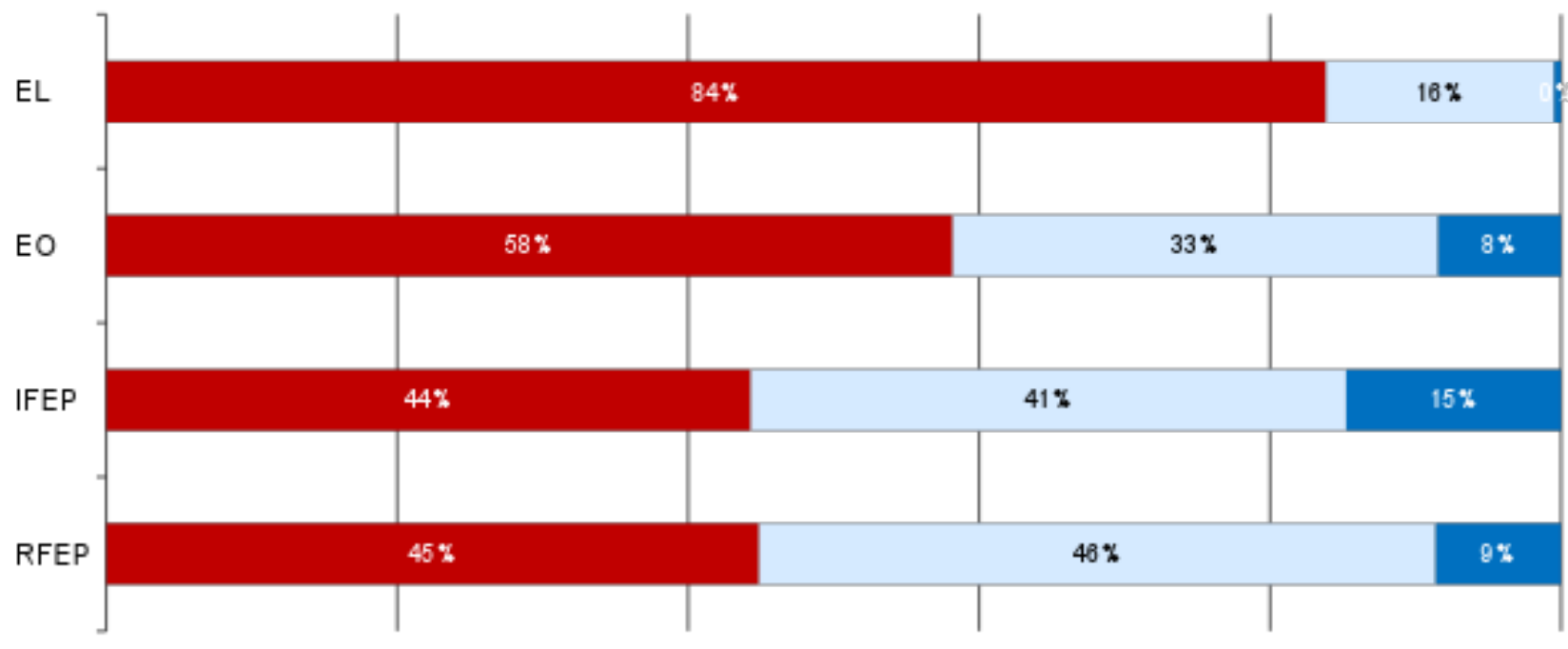
Expressions & Equations Results by English Proficiency

Below Standard At/Near Standard Above Standard



Operations & Algebraic Thinking Results by English Proficiency

■ Below Standard ■ At/Near Standard ■ Above Standard



Next Steps

All student data from these assessments are loaded into Illuminate for Principals, teachers and others to use and examine.

- Staff have used PD time and will continue to use time to examine the results
- Staff are becoming more familiar with the SBAC digital resource library for resources and support
- Coaches and central office leaders are supporting schools to understand standards and aligned lesson and unit plans
- Partners such as the Reach Institute, PISI, and SVMl will continue to support our schools and teachers
- We will examine our growth on our next math assessment

Research, Accountability, Assessment and Data

Our Vision

Research, Accountability, Assessment and Data is a collaborative team that supports the district to provide the highest quality education for all students by engaging with departments, schools, teachers and families to use accurate data and tools for school and district level planning and innovative research.



Research, Accountability, Assessment, and Data

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