

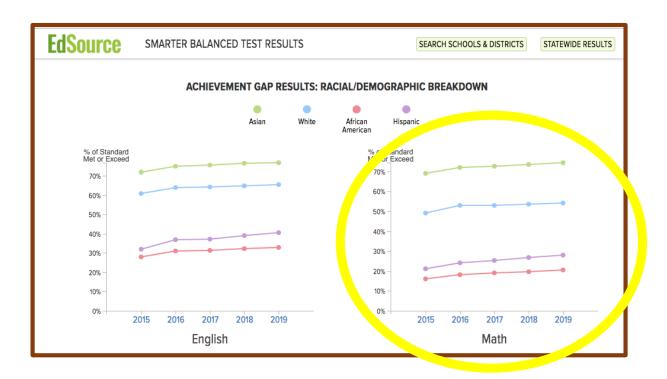
STEMulate Learning **4** Education "Where STEM Begins with Them."

STEMulate Learning 4 Education is a non-profit California 501(C)(3) corporation whose mission is to **promote and develop the love of math** in students, teachers and parents as the foundation for student success in STEM related fields. Our experience in providing training to teachers and instruction to students that is inquiry-based, culturally relevant and life-affirming has transformed teacher effectiveness and empowered students to overcome their fear of math.

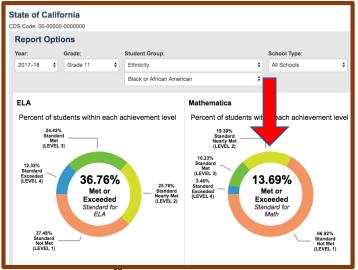
The Problem

California, the highest populated state in the country, has many great attributes, including being ranked 4th in terms of economy and higher education. However, California ranks a dismal 37th in the country in K-12 education. The major reason for this statewide disaster is our performance in math. Sadly, **only 39% of students in California are proficient in math.**

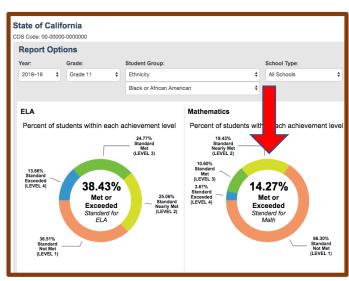
Our state's inability to effectively teach math to Black and Latino students will have a dramatically negative impact on our economy, expanding the achievement and opportunity gaps, and further dampening the American Dream for people of color.



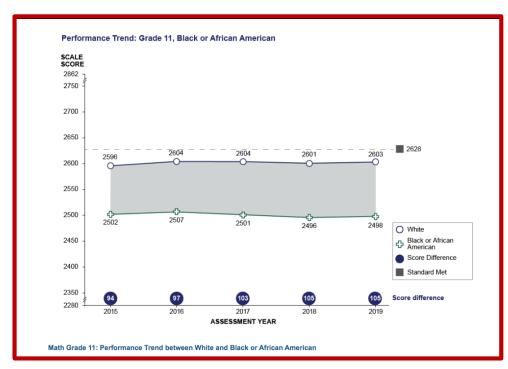
The CAASPP data reveals the alarming inequities faces by African-American students, as evidenced by their low achievement in math. For 11th grade African-American students, there was LESS THAN a 1% improvement from 2017-18 to 2018-19. The daunting effects of poverty, inadequate resources, trauma, inexperienced teachers, and minimal access to enrichment programs have all contributed to the persistent achievement gap in mathematics.



CA 11th grade African-American math proficiency 2017-18



CA 11th grade African-American math proficiency 2018-19



Achievement gap between 11th grade African-American and White students in mathematics.

Our Philosophy

We believe proficiency in math is the key to unlocking opportunities in the 21st century for underserved students and those living in poverty. While the current lure for young students of color is athletics and entertainment, we know these fields have limited opportunities for high paying careers. However, STEM related careers have millions of jobs available that American's are not qualified to fill. The major hurdle? Mathematics.

Through our holistic approach to learning and training, we incorporate a triangular approach to rigorous mathematics instruction, consisting of **Social Emotional Learning, Cultural Competence, and a Growth Mindset framework**. We create a positive learning environment that fosters a discovery approach to problem solving and builds in students and instructors the mental edge necessary for success in all K-12 levels of math. We believe students should be afforded the opportunity to explore math as it relates to their world, giving them ownership and pride in their learning—removing the hurdle.

The Solution

ARMS-MFL: Student Success Program

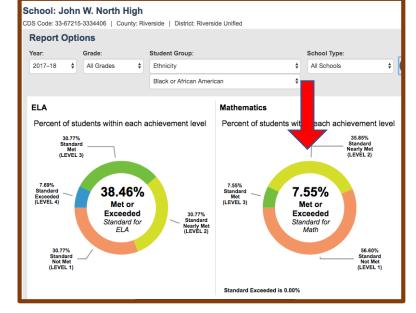
ARMS is an educational program designed to assist students in their pursuit of mathematical acumen and success in Algebra and beyond. We specialize in *ALL THINGS ALGEBRA*, identifying the high leverage math skills needed to achieve a deep understanding of Algebra, combined with engaging activities that address the cultural and social emotional needs of students.

The MASTERStudent™ Program (MSP) trains students how to think, behave and become 'A' students. The program is based on 10 years of student feedback about their 'best practices' that propelled them to get accepted to top colleges and universities. The MSP develops mindsets, organizational skills and work habits that make learning deeper and more personal for students. Our underserved and underrepresented students need additional scaffolds, supports and tools to increase their self-esteem and skills that allow them to compete with the best and brightest students in California.

The MFL (Math Football League) is a collaborative game format that trains middle and high school students to improve their current academic grade in math and to increase their scores on standardized tests. It was created to simulate the structure of football, and combines rigor and excitement through coaching, instruction and competition. It increases student collaboration in class and enhances the implementation of the Standards for Mathematical Practice.

Success of the ARMS-MFL Program

Data shows that California's lowest performing students in math are
African-American students. Since 2015, there has been slow growth in the
performance of African-American students in math. However, a bright light has emerged in
Riverside, CA. With the implementation of the ARMS-MFL program at North High School in
2018-19, the standardized test scores for African-American students increased by 26.4% in
one year!! We look forward to sharing our transformative program with other schools, districts
and community programs to increase our impact throughout the California.

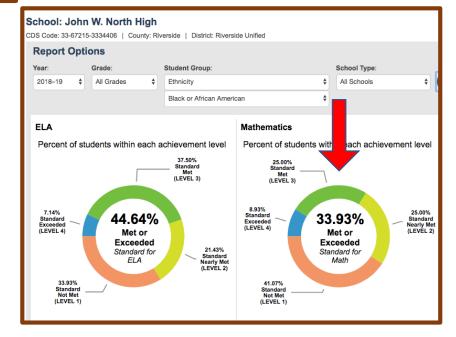


North High School 2017-18 CAASPP Scores for African-American students



https://youtu.be/6YNHrKeQISg (secret sauce)

https://youtu.be/TMIZwPe_2jk (black student scores rise 26.4%)



North High School 2018-19 CAASPP Scores for African-American students