Senate Bill 359

California Mathematics Placement Act of 2015

Senator Holly J. Mitchell

THIS BILL

SB 359 requires school districts with 8th grades and/or 9th grades to develop, establish, and implement fair, objective and transparent mathematics placement policies that consider multiple objective measures (i.e. California statewide assessments, and pupil course grades) as the basis for placement and (2) permit multiple checkpoints to assess placement accuracy and pupil progress, especially at the start of the academic year..

Further, this bill will require that mathematics placement policies provide clear recourse for students and parents who may question individual placement decisions.

ISSUE

Students learning the skills required for STEM careers play a critical role in driving the future of California's innovation and economic growth.

However, according to multiple reports, including a July 2014 Brookings Institute report, there is a shortage of workers possessing the skills used in science, technology, engineering, and mathematics (STEM) occupations. Despite an urgent need to increase the number and diversity of workers entering the STEM career pipeline, studies conclude that many successful math students, particularly African-American and Latino students, are being unnecessarily held back in math.

SB 359 refers to math misplacement that occurs when 9th grade students are held back to repeat their 8th grade math course despite achieving a "B" grade or better, or testing at proficient or even advanced on state assessments, instead of being advanced to the next course in the recommended math sequence as a freshman in high school.

Many people think of math misplacement as accelerated promotion of the inadequately prepared or unprepared students too quickly, to the detriment of the student. However, math misplacement in this bill identifies and raises the visibility of a critical missing piece of math misplacement practice.

Most universities, including the California State University and University of California, require at least three years of math for college eligibility and prefer students who have taken high-level math courses such as Calculus or Advanced Placement Statistics.

Because colleges evaluate students on their academic preparation and the rigor of their academic track record, those who are forced to repeat the 8th grade math course have less time to complete required and challenging coursework necessary for college admission.

Without advanced math classes in high school, a student is derailed from his or her college trajectory and is unlikely to be competitive for college entrance.

Failing to take high level math classes in high school can have significant ramifications on the student's future economic success. In many instances, misplaced students are unlikely to be competitive for the highly compensated, highly sought-after fields of STEM while California companies continue to struggle to fill positions that require skilled STEM workers.

BACKGROUND

According to a 2010 Noyce Foundation study called the *Pathways Report*, nearly 65 percent of students who took Algebra I in 8th grade were made to repeat the class in 9th grade,

particularly Latino, Black, and Pacific Islander students.

Failure to master the subject matter was not the cause. Sixty percent of the students who repeated the class had scored "proficient" or "advanced" in the California Standards Test (CST) in Algebra when tested in the 8th grade (Waterman, 2010). Research tells us that math placement decisions for middle school students can have profound effects on their self-confidence and math success in high school.

New research findings by Neal Finkelstein, an education researcher at WestEd, shows that it is less common for students of color, even high-achieving students, to enroll in Calculus in the 12th grade compared to their peers (Finkelstein 2014). Finkelstein has been studying course sequences related to higher education preparation with a particular interest in how the new Common Core State Standards in math will solidify preparation and reduce the need for remediation."

In January 2013, the Lawyers' Committee for Civil Rights of the San Francisco Bay Area released the report entitled *Held Back – Addressing Misplacement of 9th Grade Students in Bay Area School Math Classes* that encourages school districts to review their math placement data to determine potential disproportionate impact on students of color and low-income students and cautions that such disparities can lead to legal liability of the school district.

SOLUTION

SB 359 (Mitchell) will help fix a leak in the (STEM) career pipeline by addressing the problems that result from school districts having unwritten and inconsistent math placement policies.

SB 359 will require school districts to develop, establish, and maintain a mathematics placement policy for 8th and 9th grades that will:

- Systematically take multiple, current or existing, objective measures such as California state assessments and pupil course grades as the basis for advancing students to the next recommended course in the mathematics sequence.

- Include multiple checkpoints that include the end of 8th grade and the beginning of 9th grade to assess placement accuracy and student progress.

- Require at least annual periodic examination of aggregate pupil placement data of the school district to ensure that there is no disproportionate impact in mathematics placement of students by race, ethnicity, or socioeconomic background.

- Make available clear recourse to students and parents who question placement decisions.

SUPPORT

Silicon Valley Community Foundation (Sponsor)
California State Conference of the NAACP (Co-sponsor)

OPPOSITION

None on file

FOR MORE INFORMATION CONTACT

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