

California Mathematics Under Common Core

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Some History

- In 1997-8 California adopted new Standards in English, Mathematics, Science and History
- The Standards were benchmarked to what international high achievers were doing
- Our Standards were consistently rated the best in the nation, including in 2010 when compared to Common Core
- California put together the STAR test to assess students on the Standards

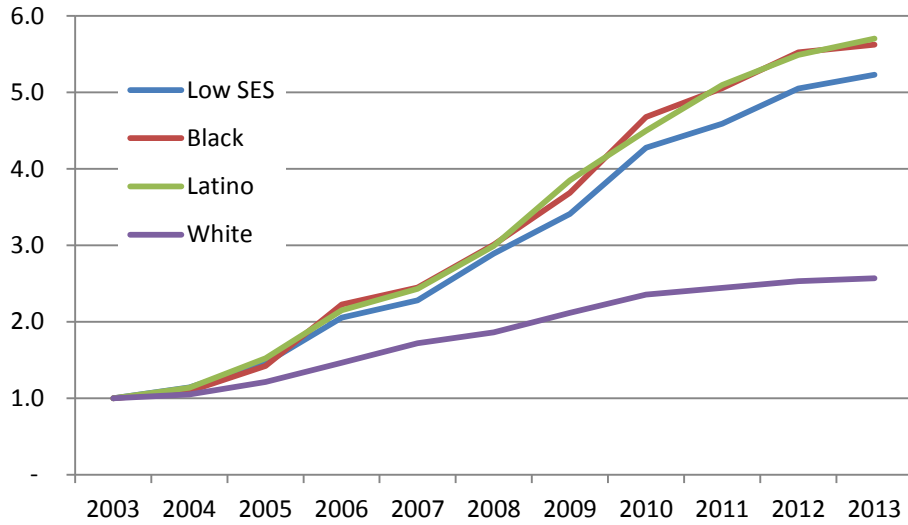
Some Math Results

- All students increased achievement over time
- By 2013
 - More students successfully took demanding high school courses such as Geometry, Algebra 2, AP Calculus
 - **White** students increased by factors of **1.5x - 2.5x**
 - **Black** students increased by factors of **2.8x - 5.5x**
 - **Latino** students increased by factors of **2.8x - 5.5x**
 - **Low income** students increased by factors of **2x - 5x**

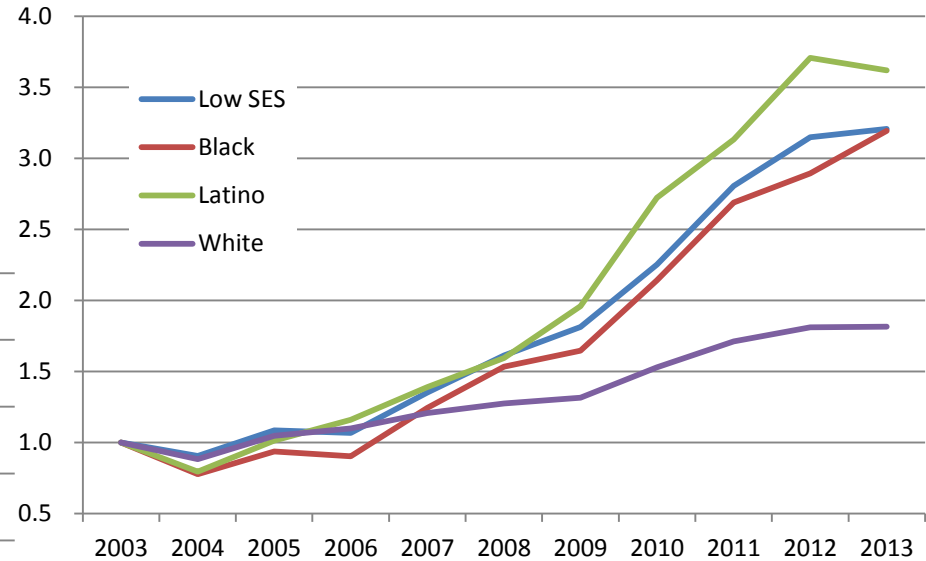
Everyone moved up, but disadvantaged students moved faster!

Change in number of successful (Proficient & above) students 2003-2013

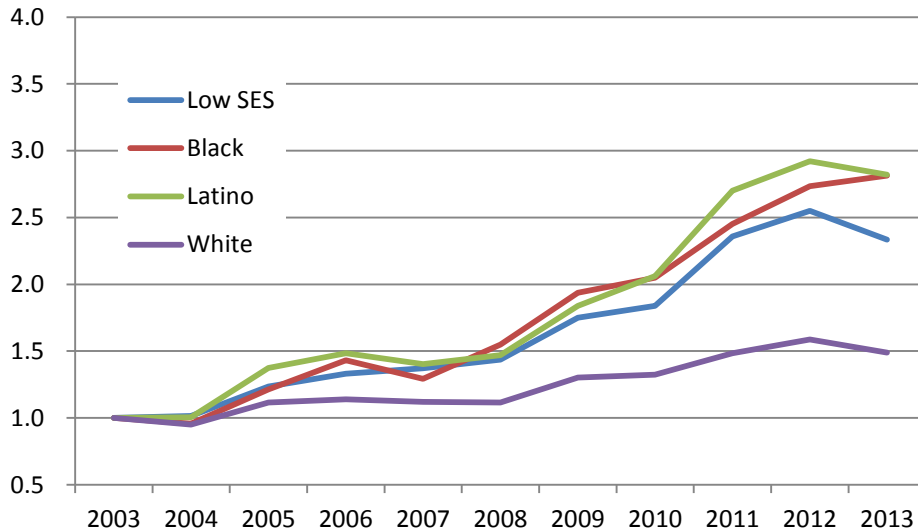
Middle School -- Algebra 1



High School -- Algebra 2

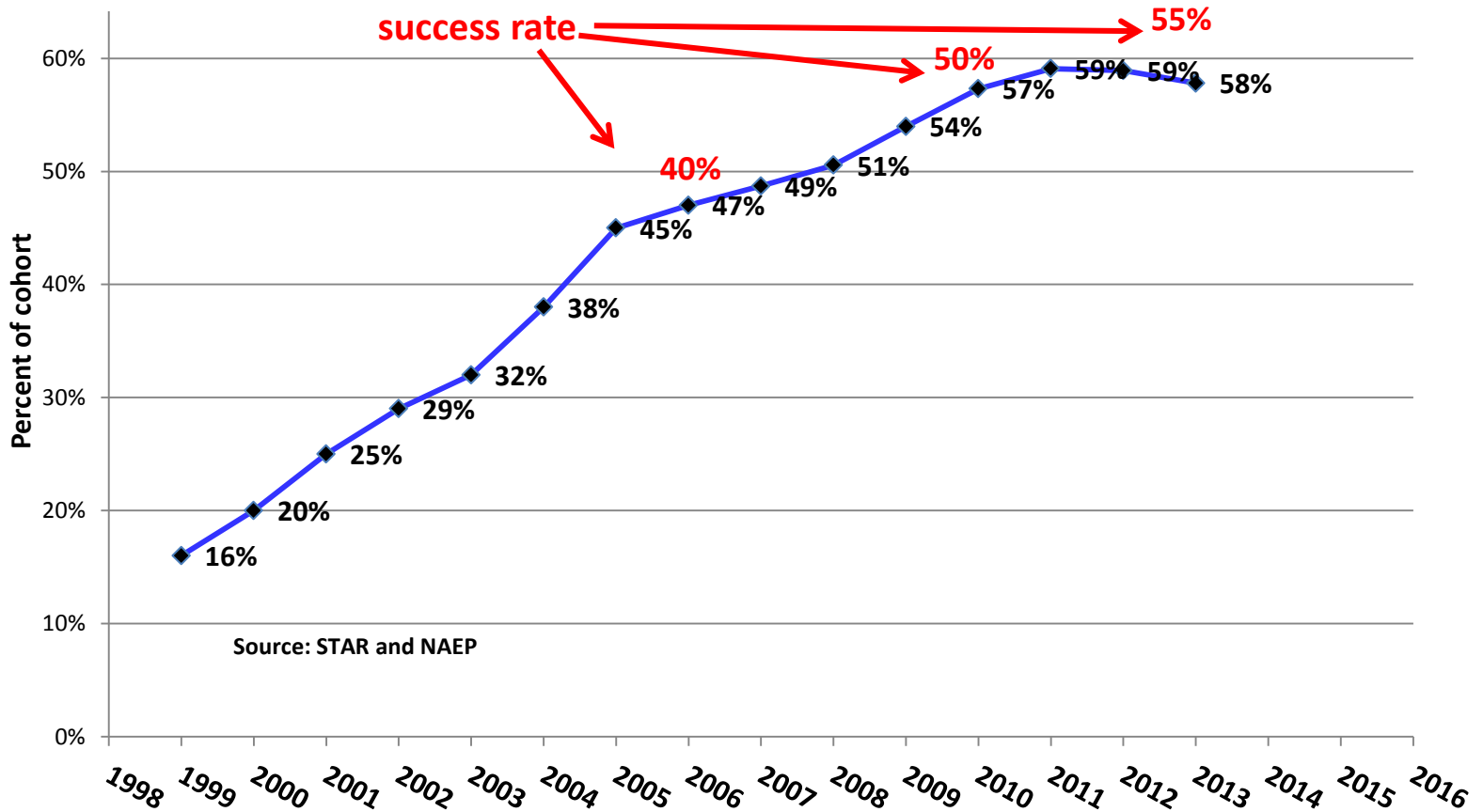


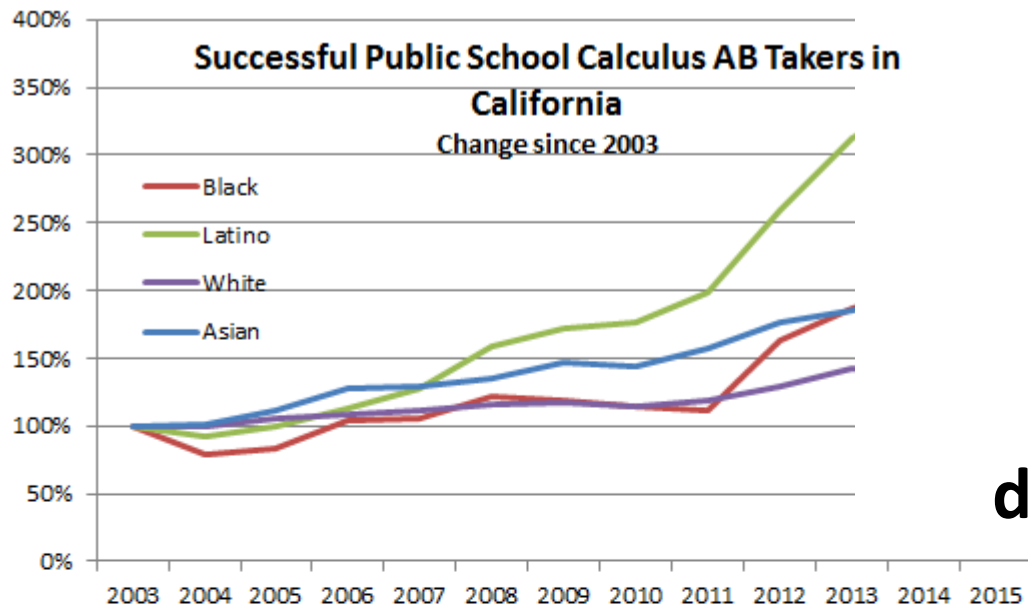
High School -- Geometry



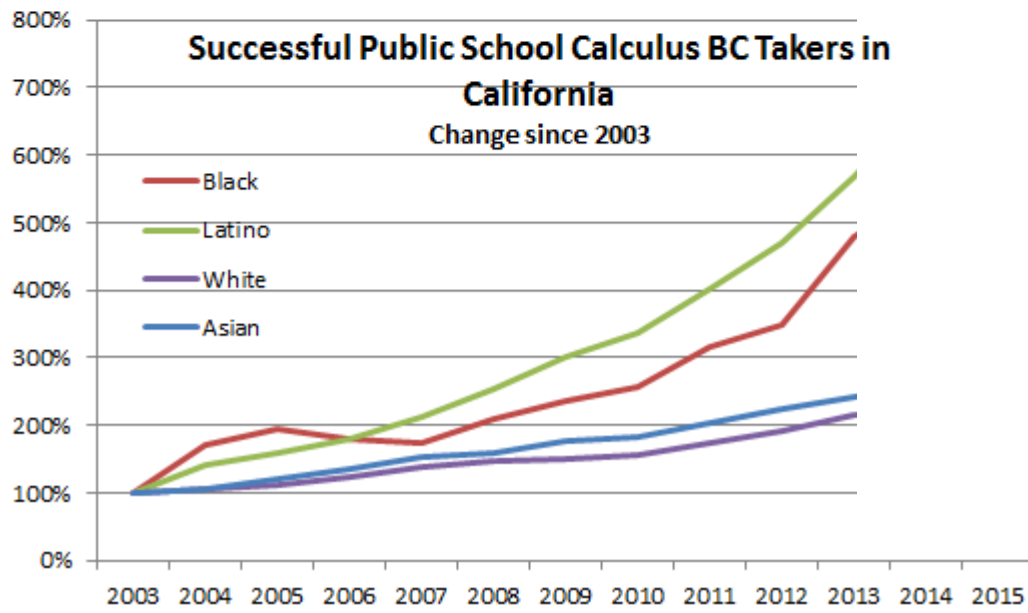
Enrollment Rapidly Increased, While Success Rate (Proficient & above) Increased Too!

California Grade 8 Enrollment in Algebra 1





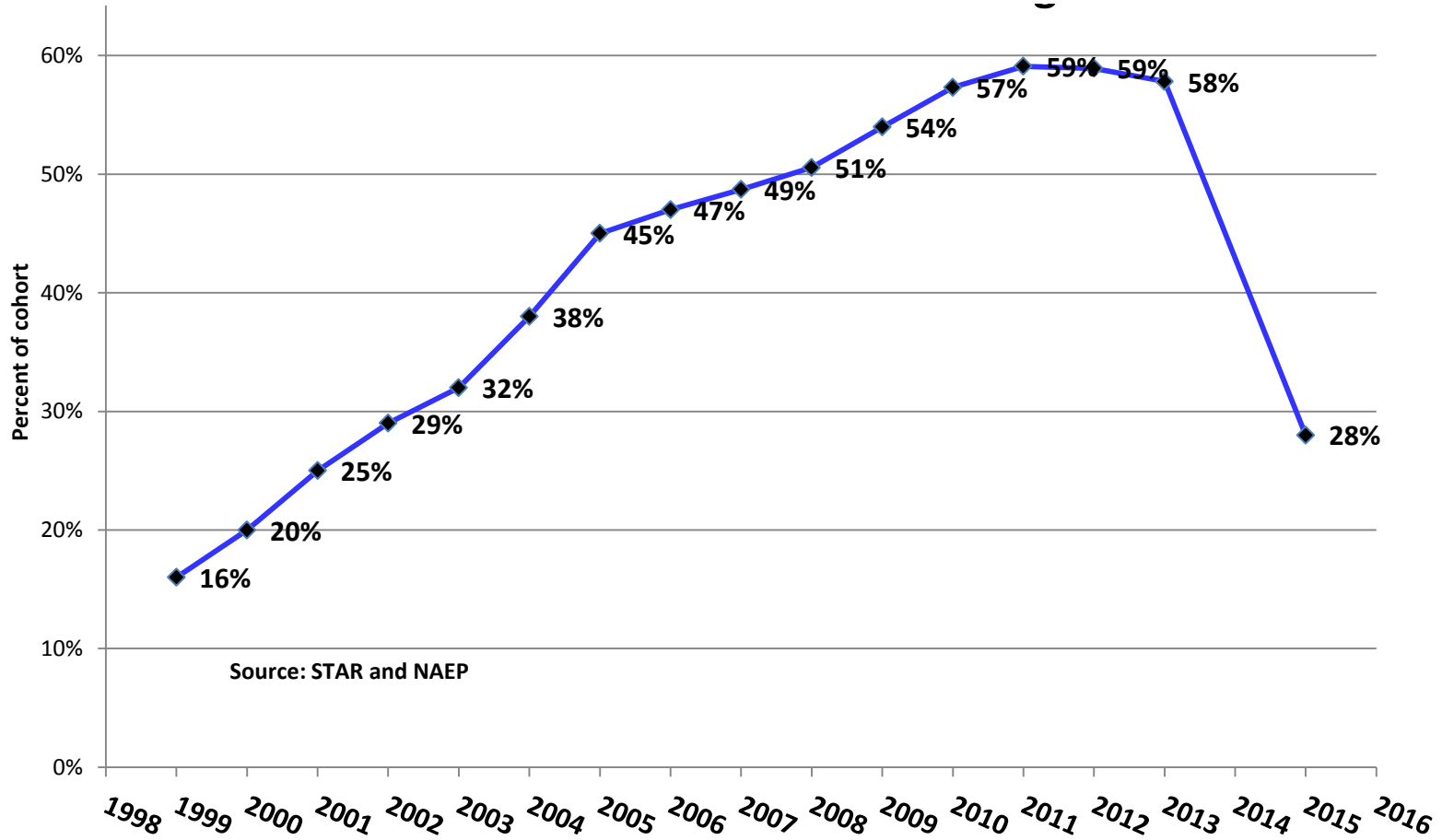
And Even AP Calculus taking took off, particularly for disadvantaged students!



In 2010 California Adopted Common Core

- Was found of lower quality and expectations than our old standards, even by Common Core supporters
- Promised to prepare everyone for “Career and College”
- Implementation started in earnest in 2013
 - STAR testing was abandoned in 2014
 - SBAC testing came on-line last year, in 2015
 - New Frameworks were written
 - New textbooks adopted

Algebra Enrollment in 8th Grade Dropped Like a Stone



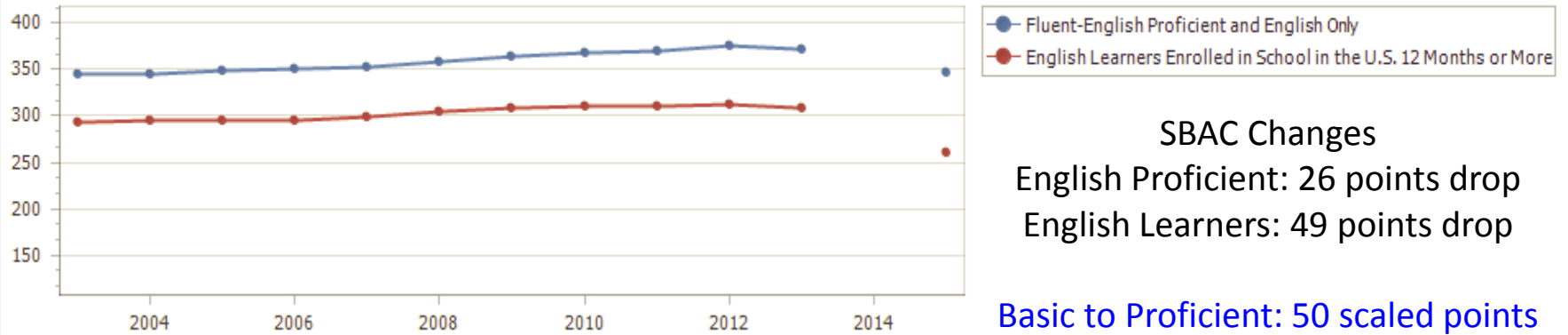
What Happened to Math Achievement?

- We don't really know
 - No more End-of-Course tests in Algebra 1, Algebra 2, or Geometry
 - Only Grade 11 summative test to verify students are “college ready”
- **However ...**

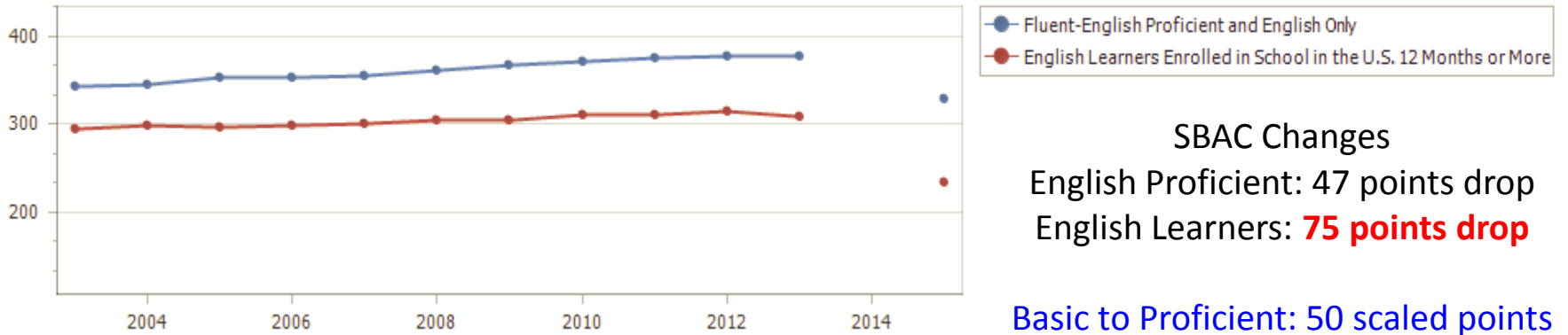
Change from STAR to SBAC Did Not Affect Everyone Equally.

English Learners, Grade 6

Mean Scale Score for State by Year
English Language Arts, Grade 6

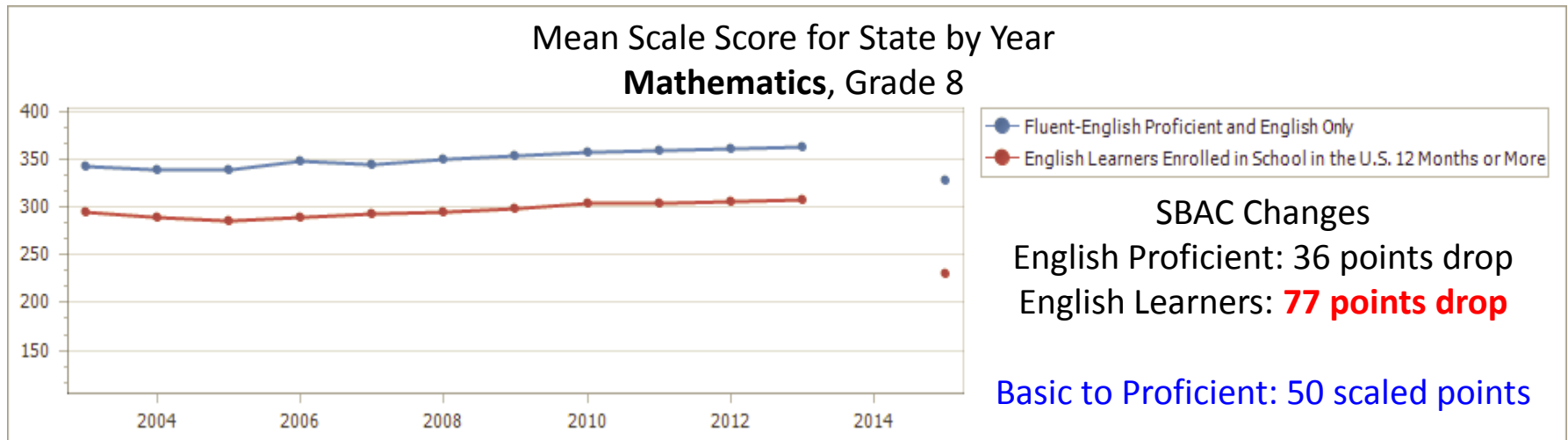
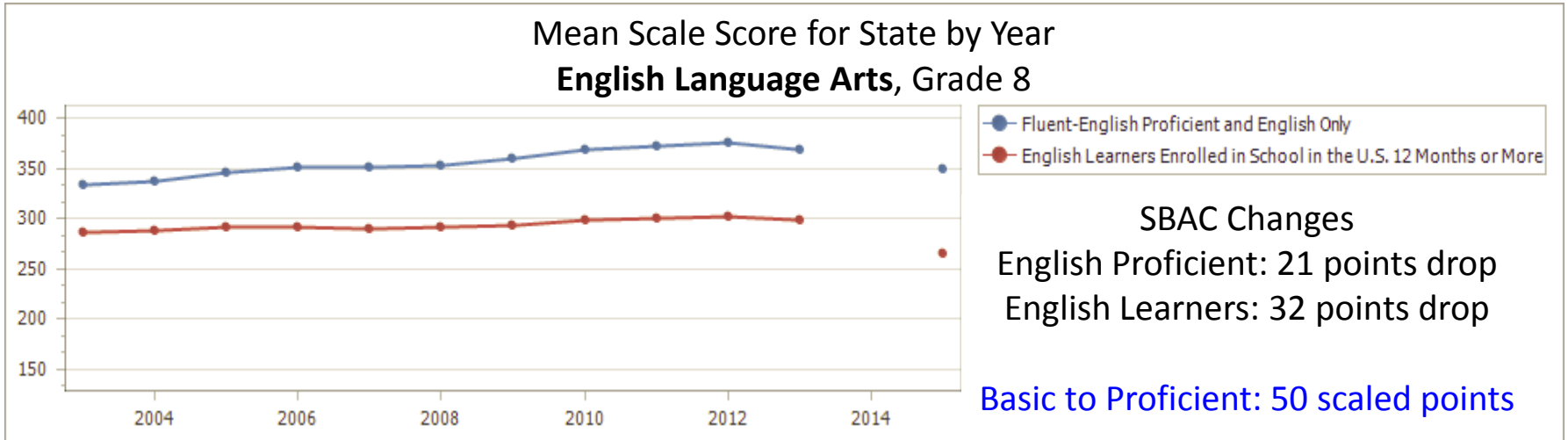


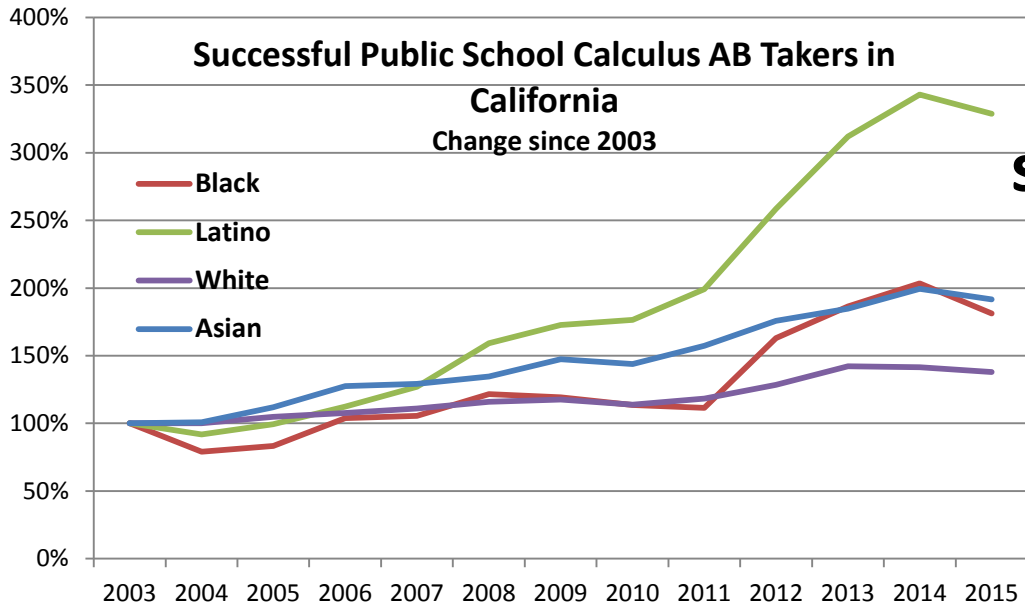
Mean Scale Score for State by Year
Mathematics, Grade 6



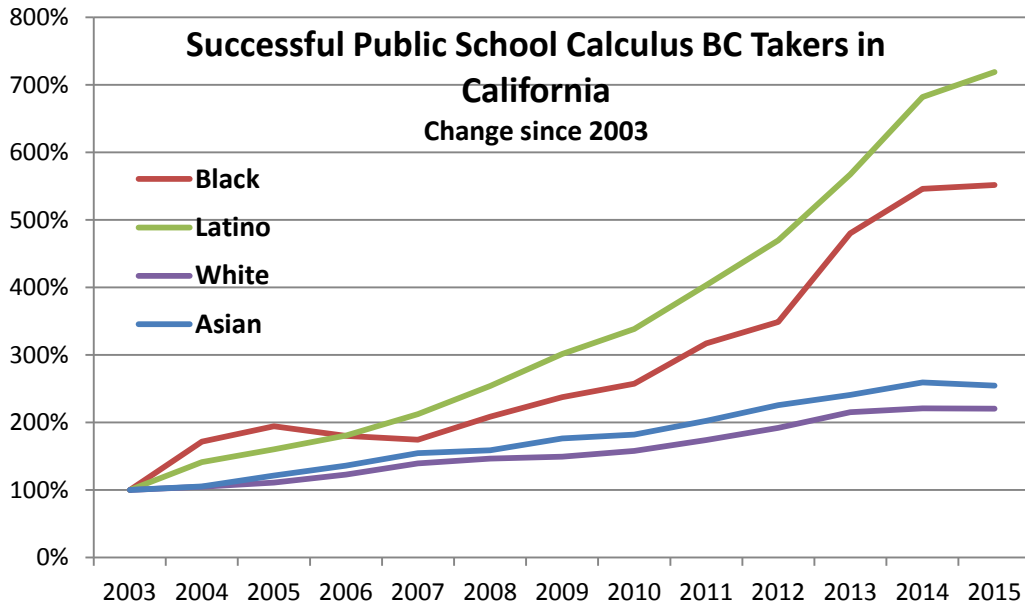
Change from STAR to SBAC Did Not Affect Everyone Equally.

English Learners, Grade 8





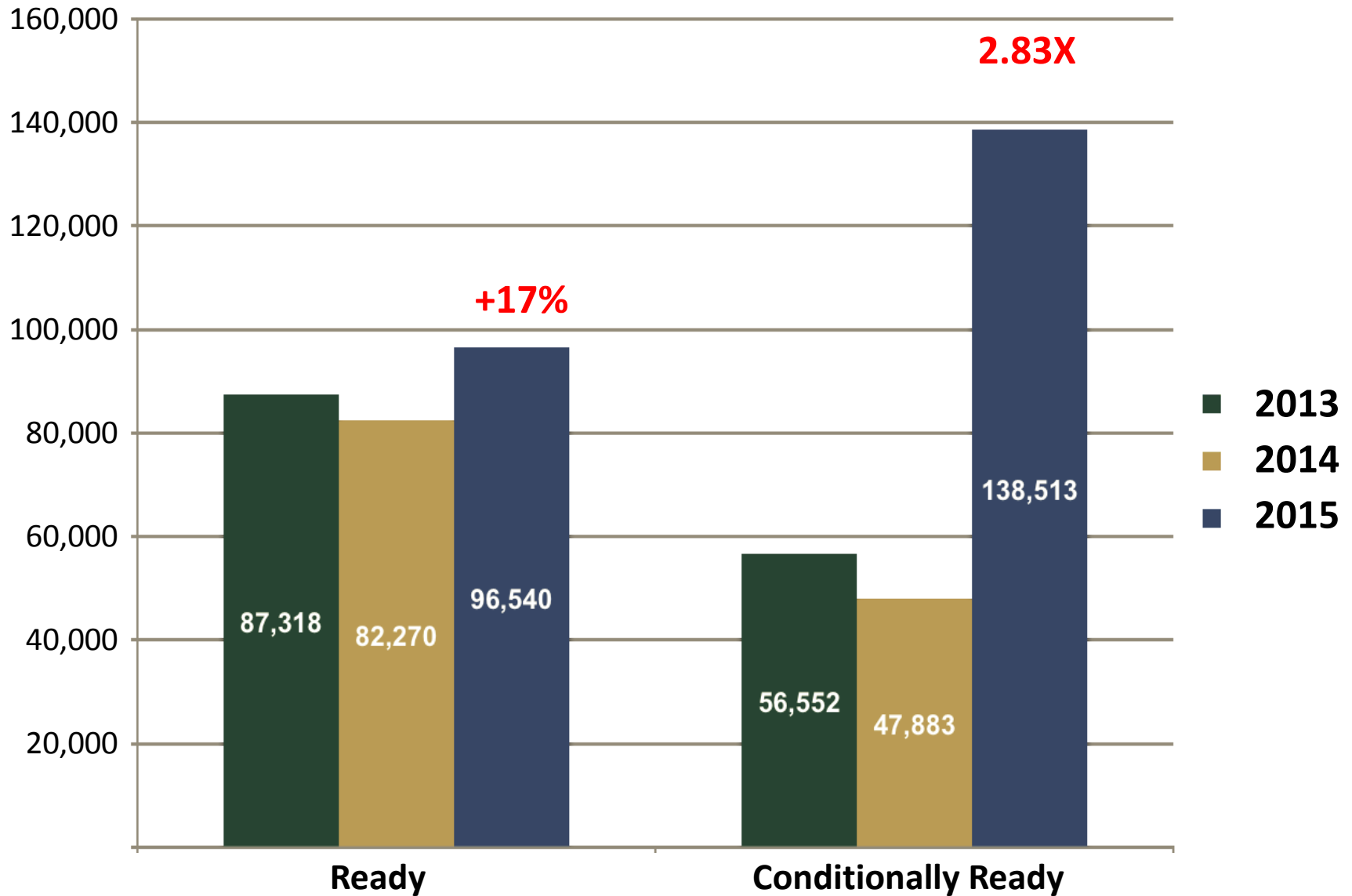
Increase in number of successful (score ≥ 3) AP Calculus students
Stopped or Reversed



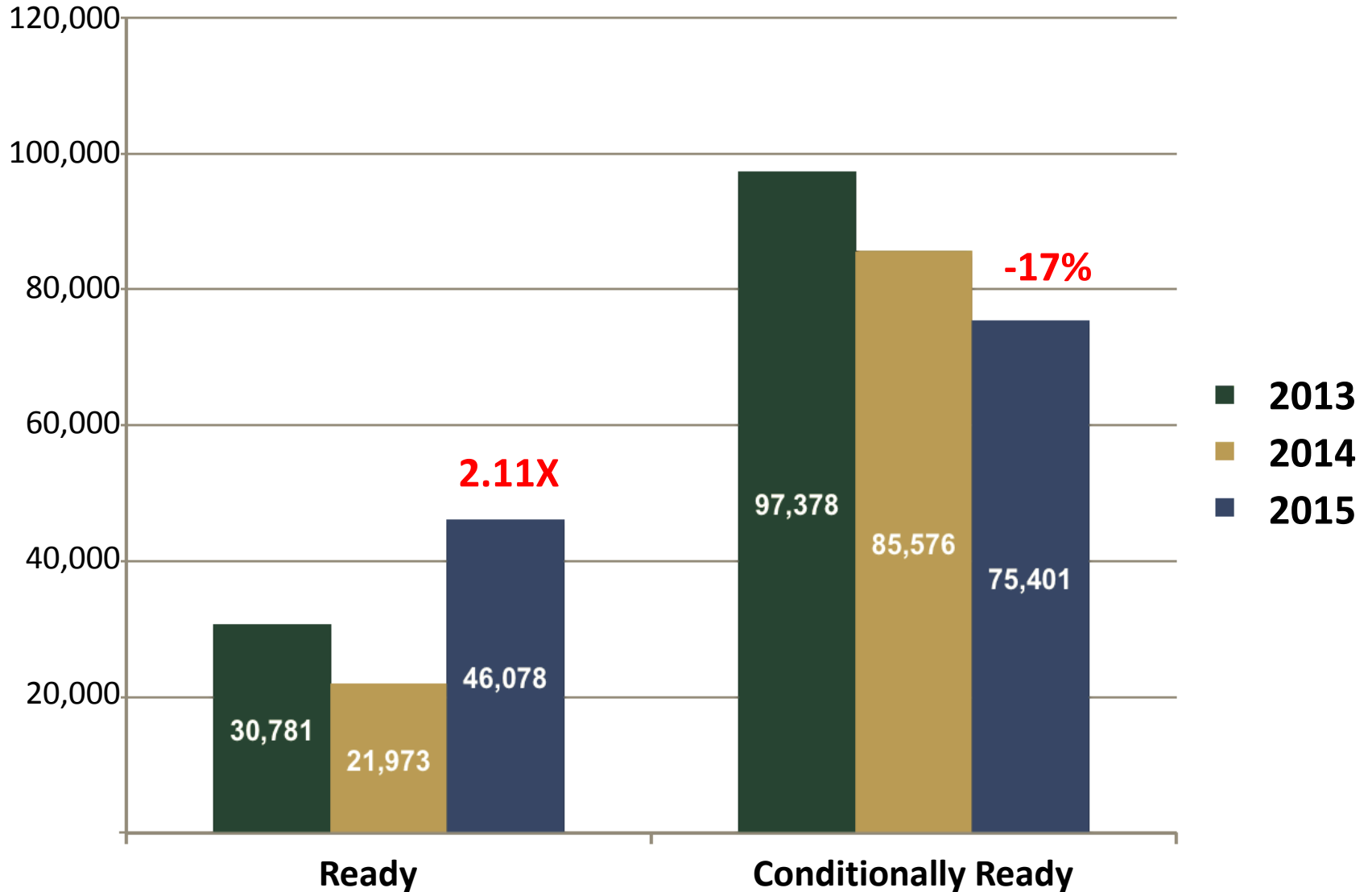
So what about that promised “College Readiness”?

- Under STAR, the Early Assessment Program (EAP) included extra dozen test items in grade 11 test, selected by CSU
- Numbers of *Ready* and *Conditionally Ready* students rose slowly over the years
- The new EAP is based on the “vanilla” SBAC test, without input from CSU
- [Here are the results](#)

EAP English Results under SBAC



EAP Math Results under SBAC



Opting Out of State Test

- The most obvious response of citizens
 - Over 50,000 opted out last year in California
- Guaranteed by California law
 - *Notwithstanding any other provision of law, a parent's or guardian's written request to school officials to excuse his or her child from any or all parts of the assessments administered pursuant to this chapter **shall** be granted*
- Empty threats to school funding.
 - Never happened, never will**
- Intimidation campaign from Sacramento

Thank You!

California New Framework Discourages Acceleration

Quotes:

1. Decisions to accelerate students into the Common Core State Standards for higher mathematics before ninth grade **should not be rushed**.

Placing students into an accelerated pathway too early should be avoided at all costs. It is **not recommended to compact the standards before grade seven** to ensure that students are developmentally ready for accelerated content.

2. Decisions to accelerate students into higher mathematics before ninth grade must require **solid evidence of mastery of prerequisite CA CCSSM**.

3. Compacted courses should **include the same Common Core State Standards** as the non-compacted courses.

When considering accelerated pathways, it is recommended to compact **three years of material into two years, rather than compacting two years into one** ... Moreover, the compacted courses **should not sacrifice attention to the Standards for Mathematical Practice**.