

The Flat World and Education

**How America's Commitment
to Equity Will Determine
Our Nation's Future**



There are Two Achievement Gaps

- The gap between white and more affluent students in the U.S. and students of color and those in poverty
- The gap between U.S. students and those in other high-achieving nations that have made greater – and more equitable - investments in education over the last thirty years.



U.S. Outcomes in International Perspective

(8th Grade PISA Results in OECD Nations, 2006)

Science

Finland
Canada
Japan
New Zealand
Australia
Netherlands
Korea
Germany
United Kingdom

U.S. is # 21 / 30 OECD nations
#31 / 40 top nations

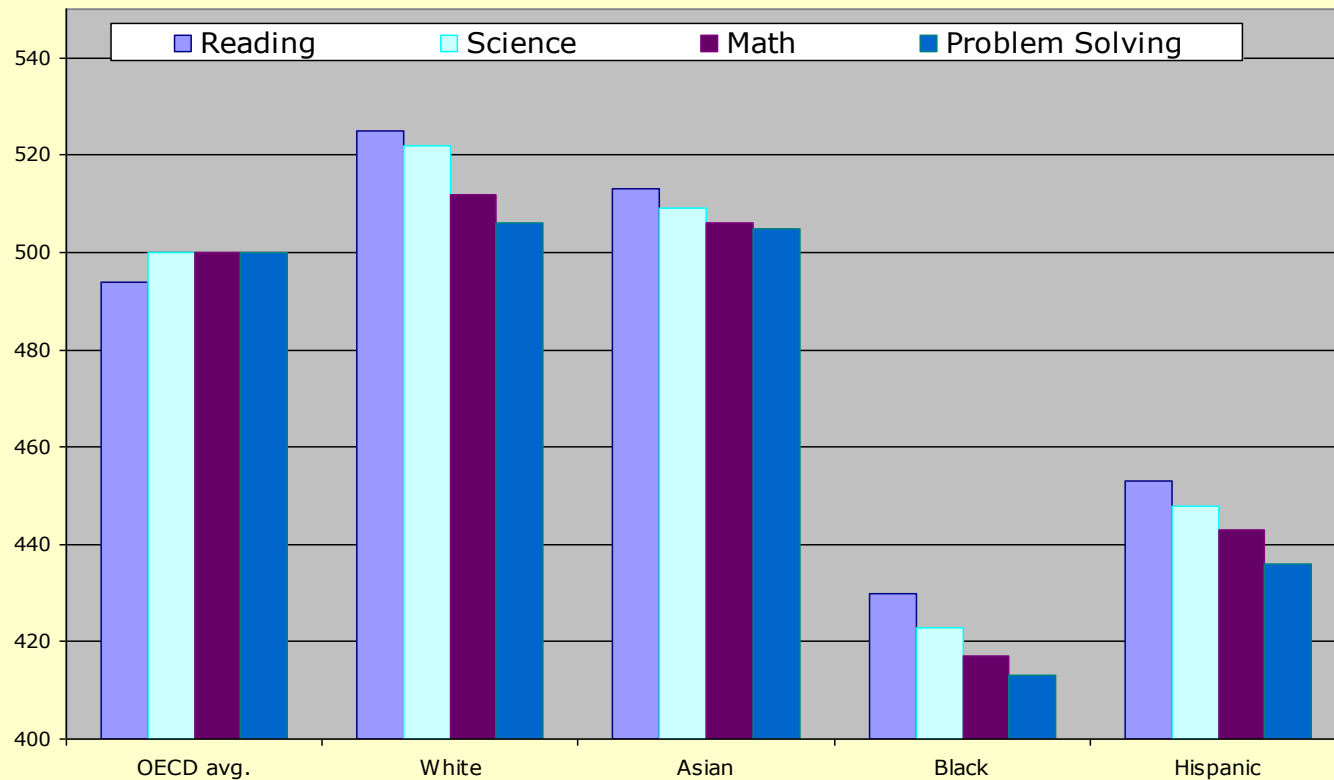
Math

Finland
Korea
Netherlands
Switzerland
Canada
Japan
New Zealand
Belgium
Australia

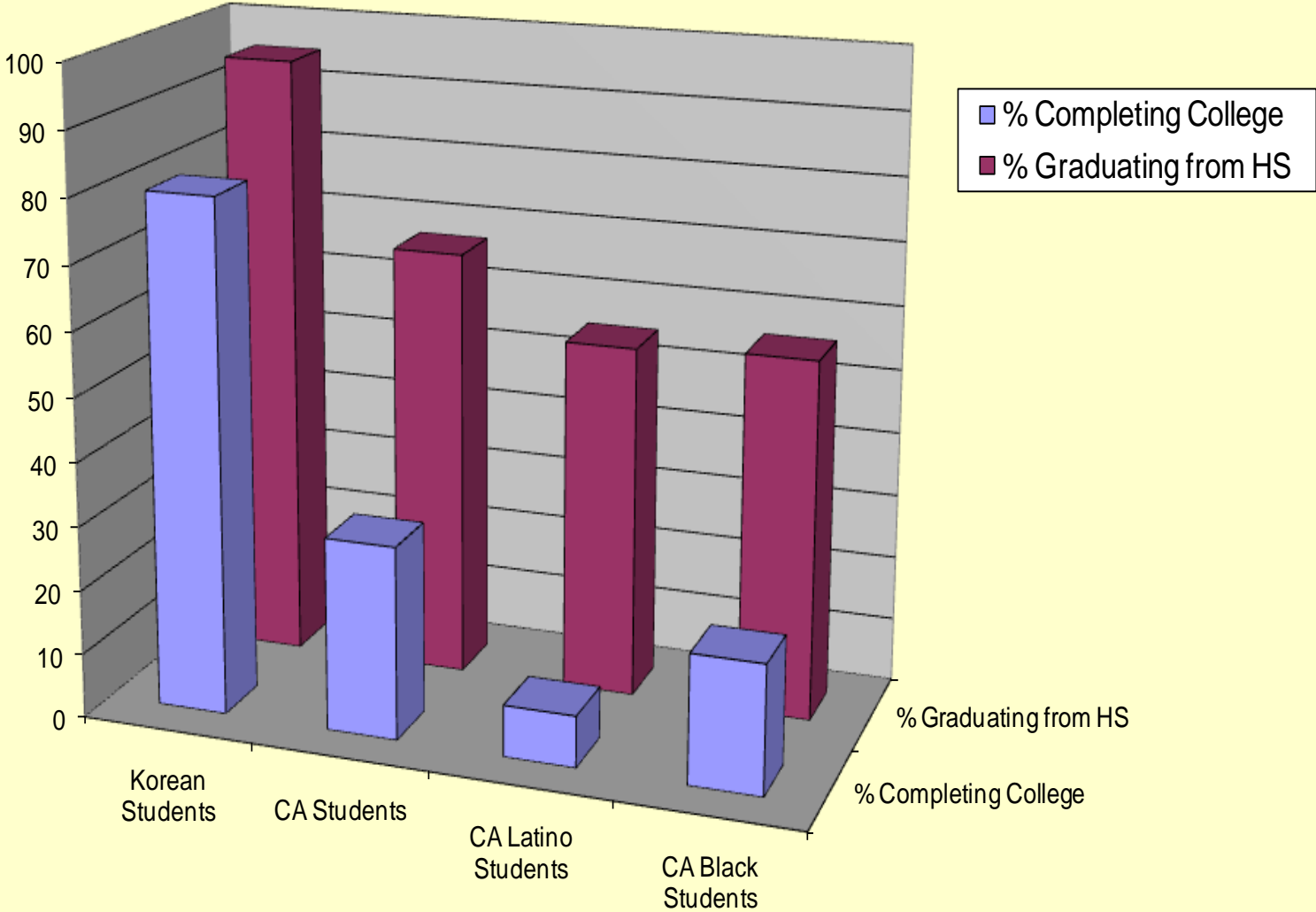
U.S. is #25 / 30 OECD nations
#35 / 40 top nations

Inequality Influences Low US Rankings

Figure 1
U.S. PISA Results, by Subgroup, Compared to OECD Average



California Outcomes in International Perspective



The Consequences of Under-Education

- A new high school dropout in 2000 had less than a 50% chance of getting a job
- That job earned less than ½ of what the same job earned 20 years ago
- Dropouts cost us >\$200 billion / year
- Lack of education is ever more strongly correlated with welfare dependency and incarceration. Most inmates are high school dropouts and functionally illiterate.
- Prison populations have tripled and corrections costs have increased by 900%, now competing with higher education costs

College-Going Declines Also Have Economic Consequences

- Each year of additional education in the population nets a gain of 3.7% in long-term economic growth (OECD, 2005).
- However, the U.S. has dropped from 1st to 17th in college participation over the last decade.
- About 38% of US students earn a college degree (only 17% of blacks and 11% of Latinos age 25-29), compared to 50% in European countries and over 60% in Korea and Singapore.
- U.S. high-tech jobs are increasingly filled by foreign nationals.

What are High-Achieving and Steeply-Improving Nations Doing?

- Universal ECE, housing, health care
- Equitable funding with investments in high-need schools and students
- Large investments in initial teacher education and ongoing support
- A lean curriculum & performance assessments focused on higher order skills
- Focus on multilingual, multicultural education

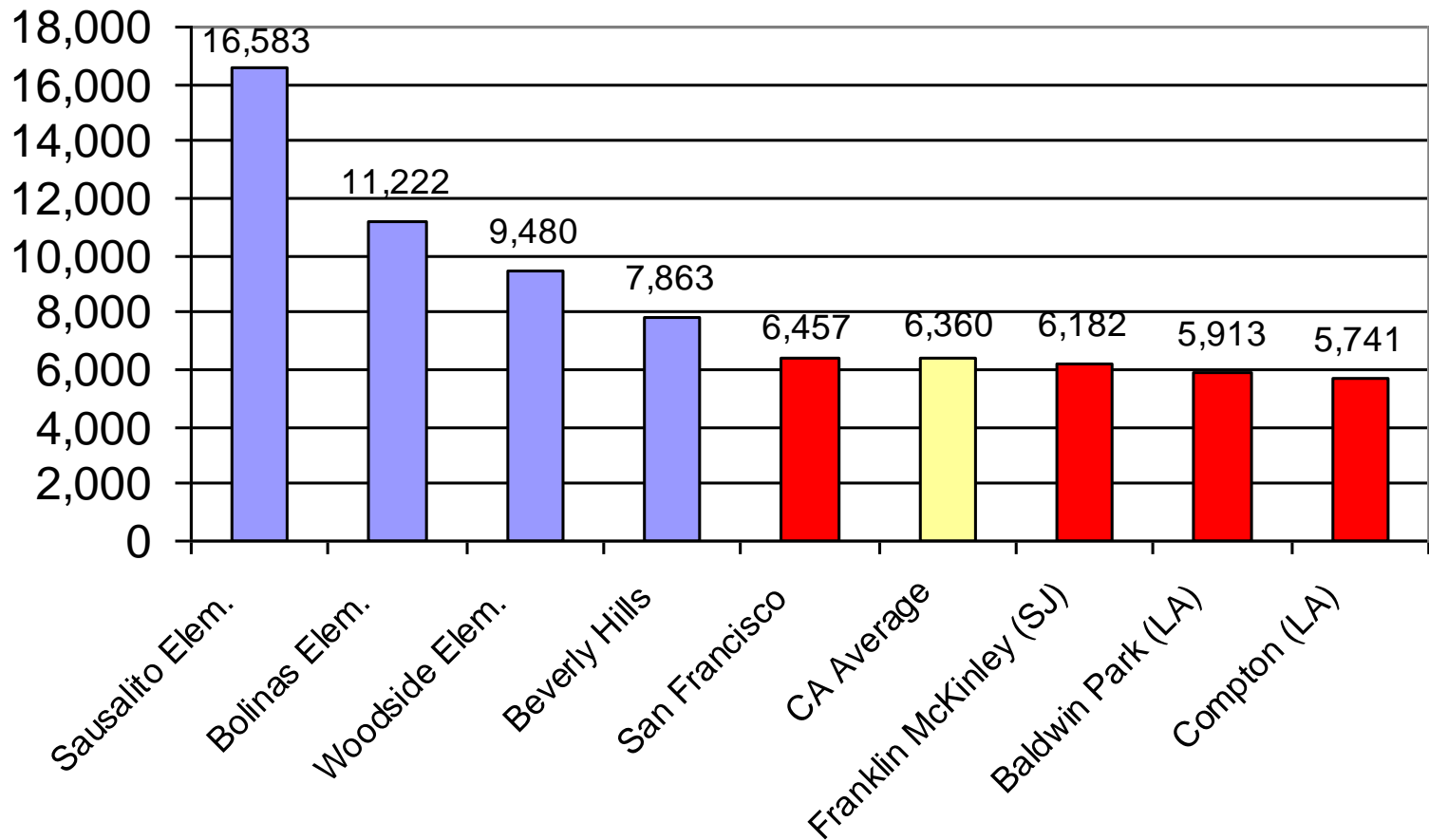
Reasons for the Achievement Gap

Students of color in “high-minority” schools have significantly fewer school resources

- Less access to well-qualified teachers
- Less access to high-quality, appropriate curriculum
- Less access to high-quality, current, and appropriate materials and equipment
- Less access to needed counselors, libraries, and other learning supports
- For ELs, less access to the kinds of teachers, teaching, materials, and assessments needed to support language learning and educational success

Education Spending is Unequal and Inadequate

California ADA Expenditures

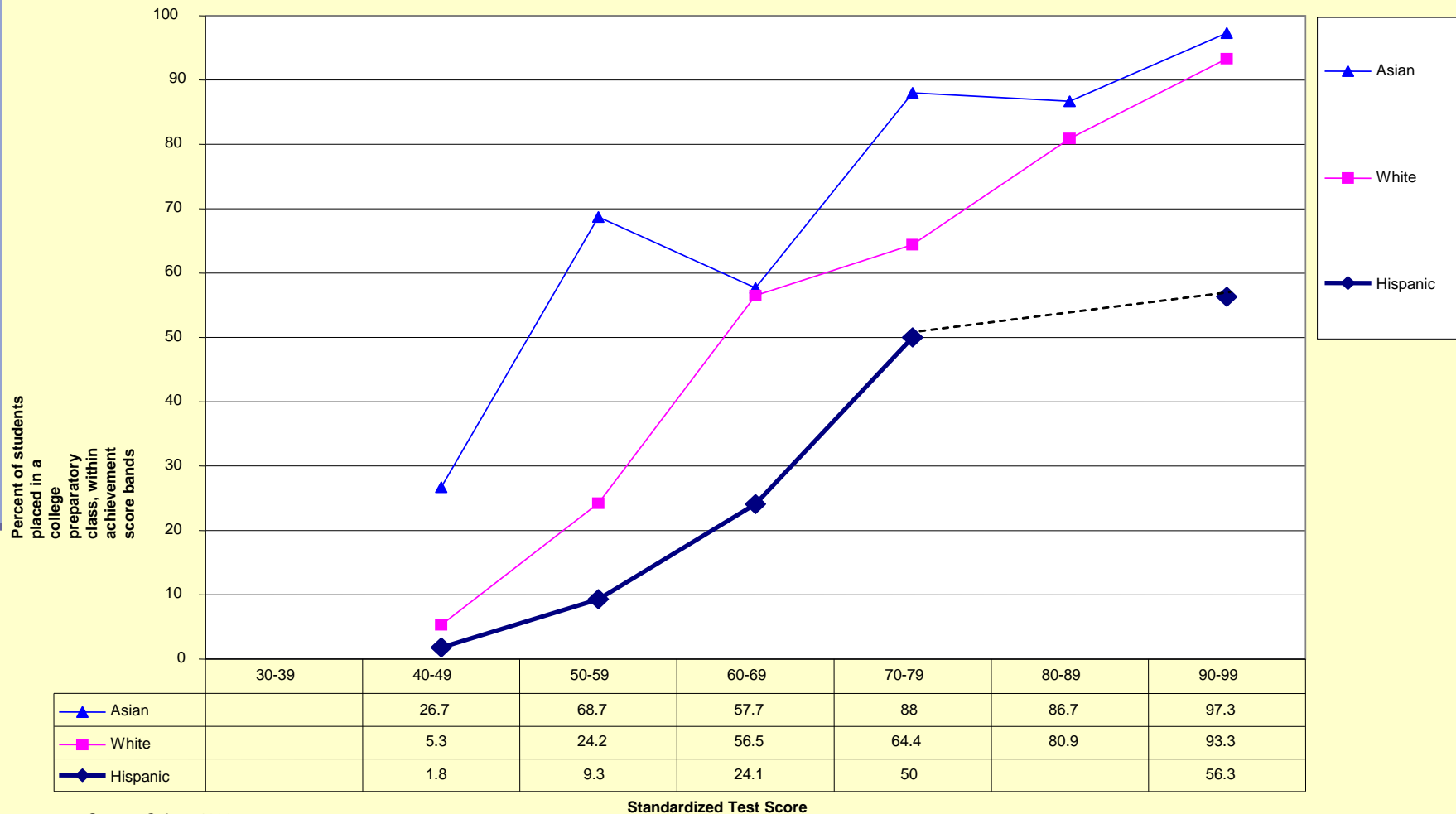


Segregation Supports Inequality

- 2/3 of Black and Latino students attend predominantly minority schools with lower levels of instructional resources
- Within “integrated” schools, most minority students are concentrated in low-track classes which receive less well-qualified teachers, less engaging and less well taught curriculum, and lower-quality materials

Tracking as a Function of Race

Figure 4 - Likelihood of Placement in a College Preparatory Course, Controlling for Standardized Test Scores (9th Grade)



Source: Oakes, 1993.

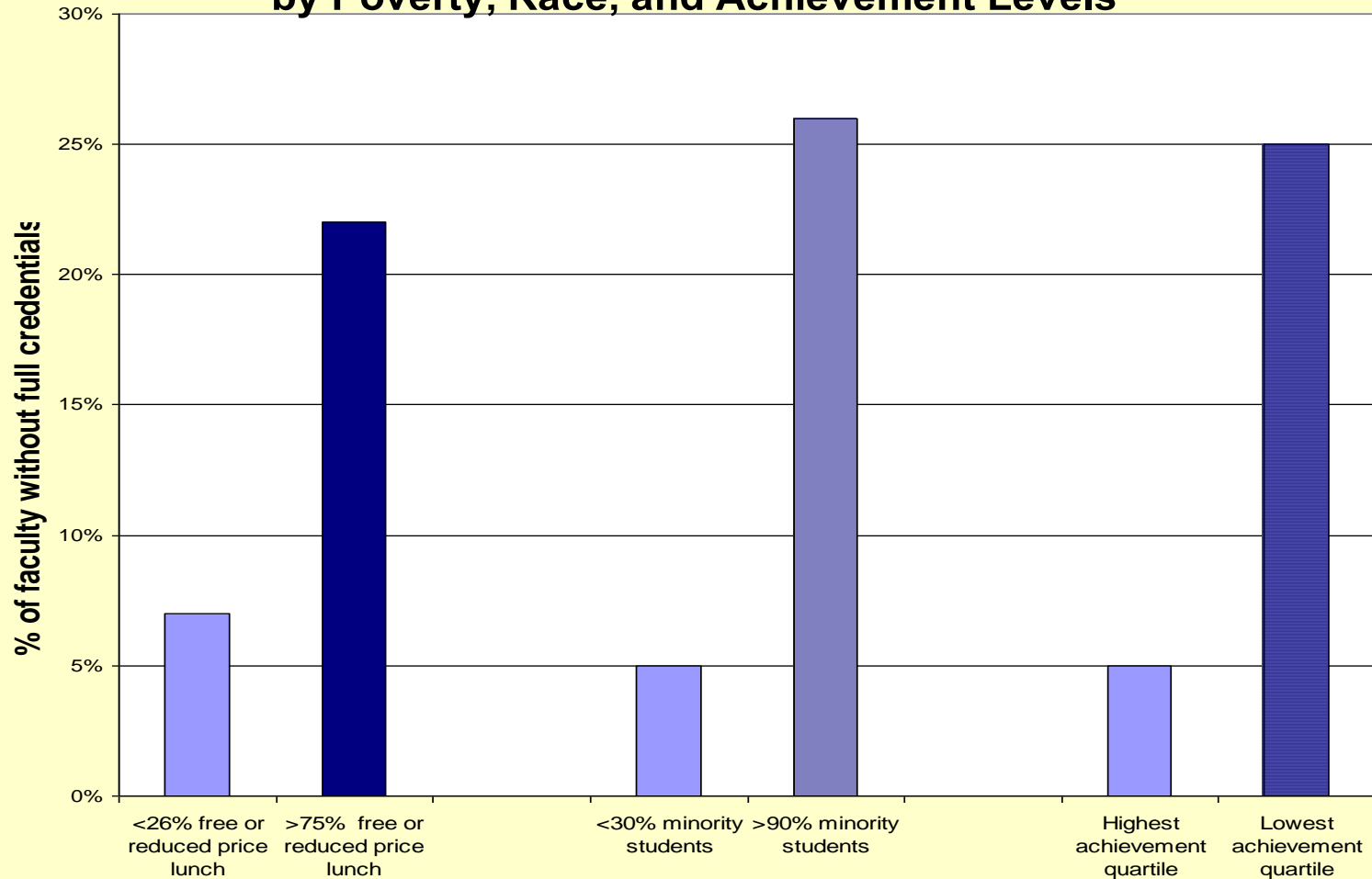
Curriculum Access Matters for Learning

Holding SES constant, minority and white students who have equally well-qualified teachers and comparable curriculum perform comparably in reading and mathematics.



The Teaching Gap Creates Most of the Achievement Gap

**Distribution of Uncertified Teachers in CA
by Poverty, Race, and Achievement Levels**



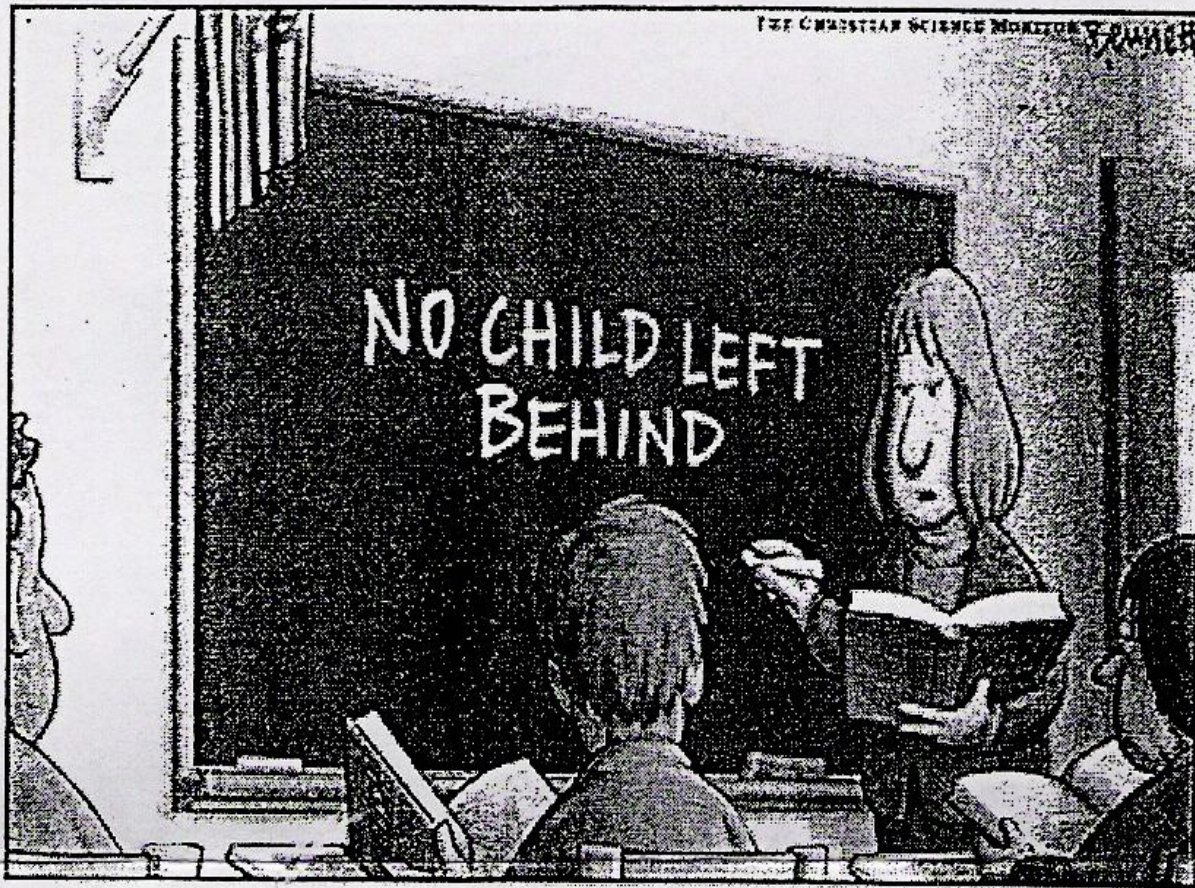
Source: Shields et al., 2001

How Did We Get Here?

- Growing inequality in income and educational resources
- Failure to maintain investments in an expert teaching and leadership force
- Zig zag policy & popcorn reforms



What Kind of Policies Can Help?



"Today you're going to learn the meaning of 'irony'."

No Child Left Behind: Noble Goals and Unintended Effects

- Goal to focus on all groups of students
- Demand for “highly qualified teachers,” but incentives for reducing preparation
- Demand for higher achievement, but incentives for
 - Excluding low-scoring students
 - Narrowing curriculum
 - Chasing teachers from high-need schools

Outcomes of NCLB

- State scores have 'increased'
- National gains have slowed
- International scores have dropped

- Inequality in resources has increased
- Schools serving EL students have been placed in increasing jeopardy
- Graduation rates have declined
- Student exclusions have increased
- Teacher attrition has grown

Strategies that Go Straight to the Periphery of the Issues

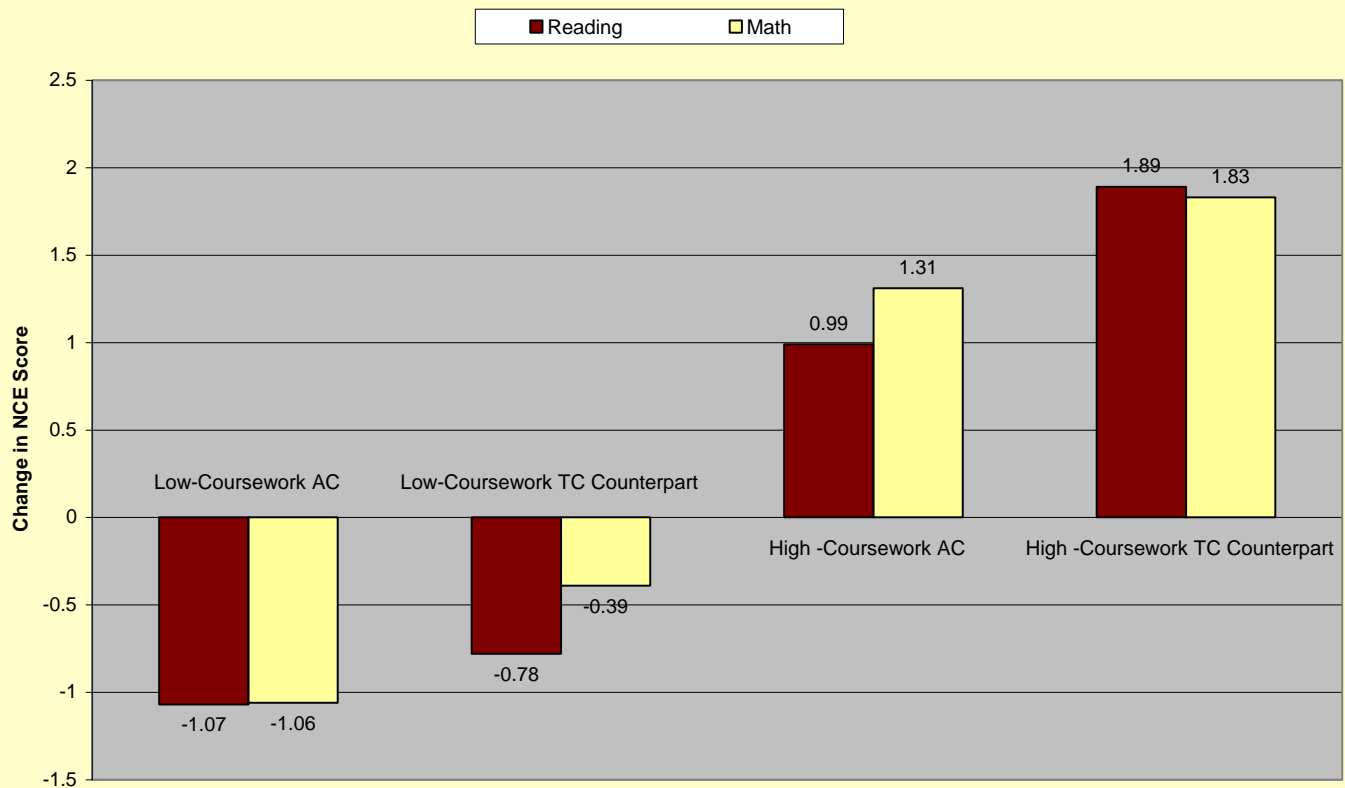
- Sanctions without supports for development
- Merit Pay without competitive, equitable salaries and working conditions
- Closing schools without creating productive long-term alternatives
- Firing teachers without investing in a stable supply of well-prepared teachers
- Requiring charters without ensuring quality and access

Although expert teachers are the greatest influence on learning, the U.S. invests less in teaching than other countries

- Preparation is uneven and largely unfunded
- Salaries are unequal and noncompetitive
- Well-prepared teachers are unequally distributed
- Mentoring for new teachers is rare
- Professional development is “hit & run”
- Learning & collaboration time is scarce: US teachers teach far more hours and have far less preparation time than any other advanced country

Underprepared Teachers Decrease Student Achievement

Fall-to-Spring Test Score Gains / Losses of Students Taught by Alternative Route and Traditional Route Teachers



Based on actual (unadjusted) fall and spring scores

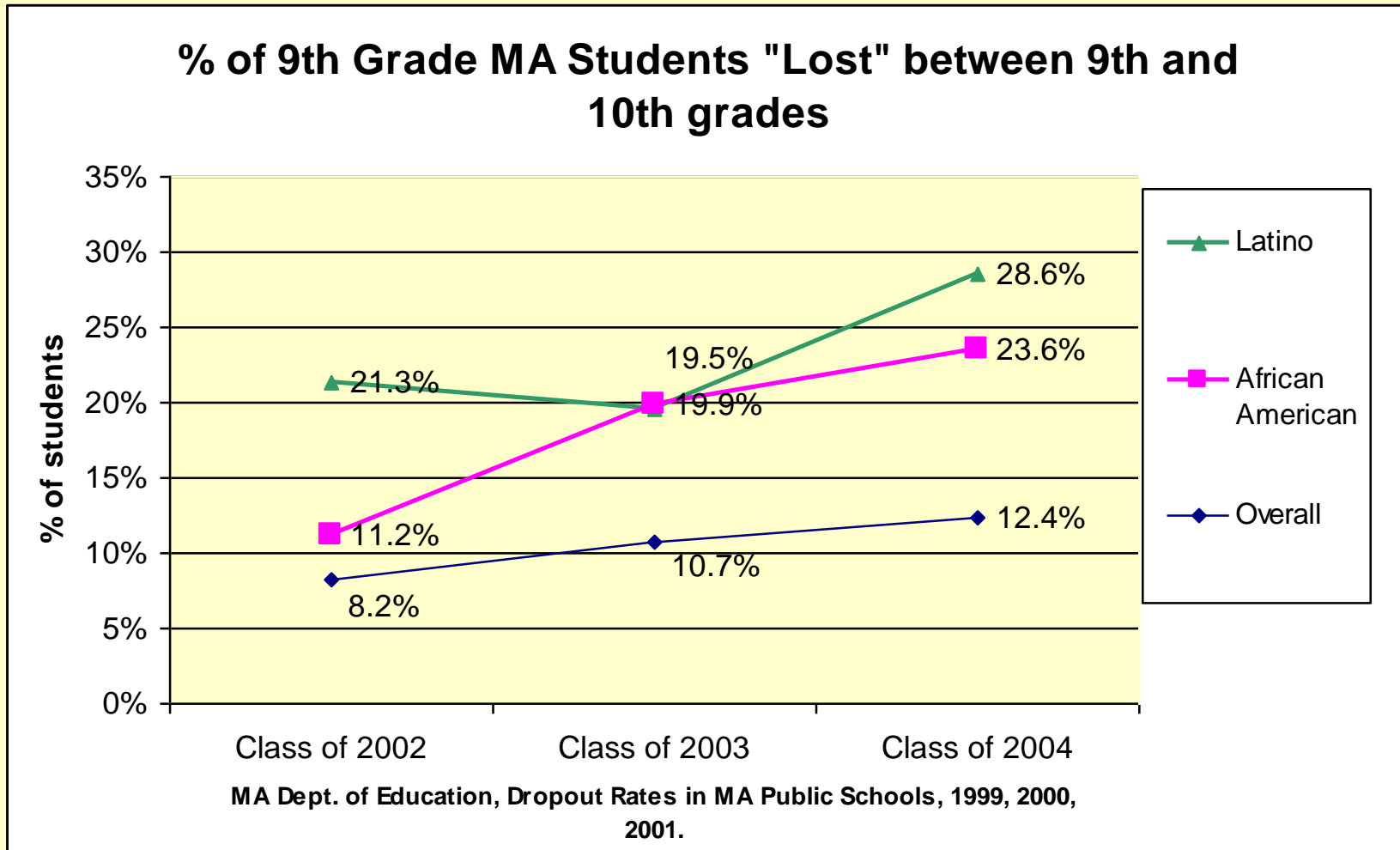
The Teaching Gap Creates Most of the Achievement Gap

- The least experienced and prepared teachers teach the least advantaged students
- High attrition rates for less-prepared and supported teachers create a revolving door and wasted resources for professional development and reform in less advantaged schools
- Each teacher replacement costs \$15,000 - \$20,000
- Students taught by underqualified teachers have significantly lower achievement in reading and mathematics.
- These effects are magnified in poorly staffed schools.
- Other reforms cannot work when the teaching force is underprepared and unstable.

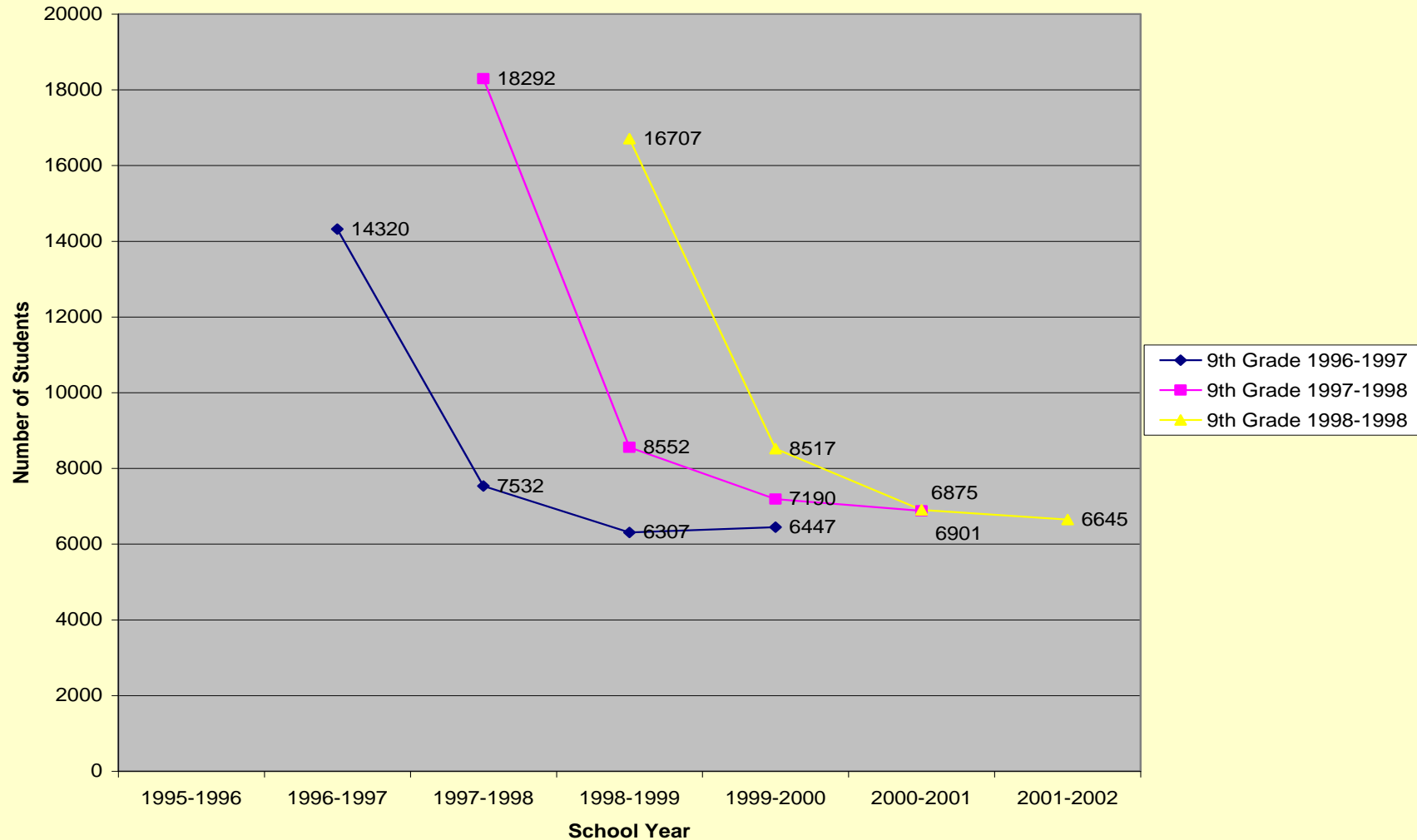
Outcomes of High-Stakes Testing Without Investing

- A more rote oriented curriculum
- Higher rates of grade retention
- Increasing dropout/pushout rates
--GA, MA, SC, NY, FL, TX
- Loss of good teachers from low-ranked schools (FL, GA, TX)
- Continued inequality in resources

What Happens to Students when New Standards Meet Old Inequalities?



Cohort Progressions through High School, “Brazos City” Independent School District Classes of 2000, 2001, and 2002



Effects of School Sanctions on Graduation Rates

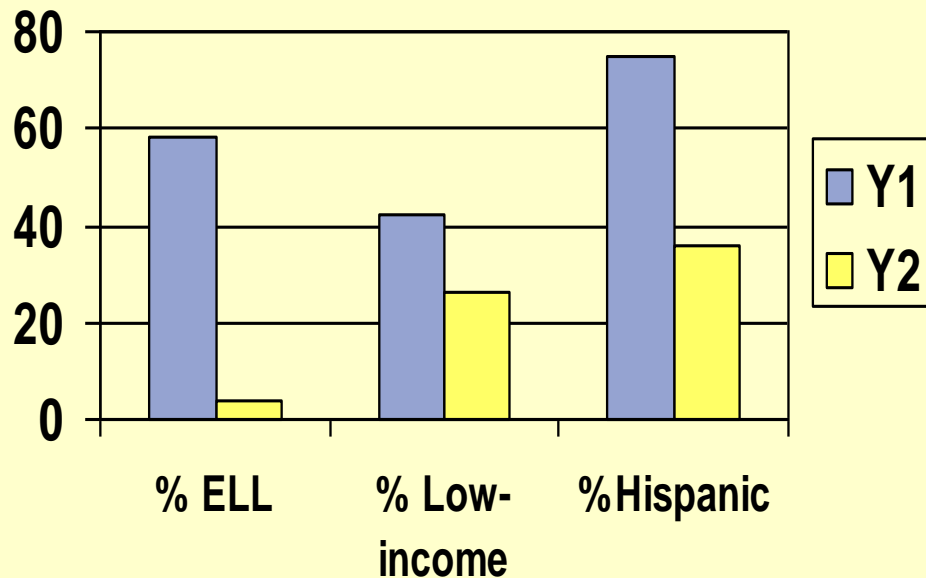
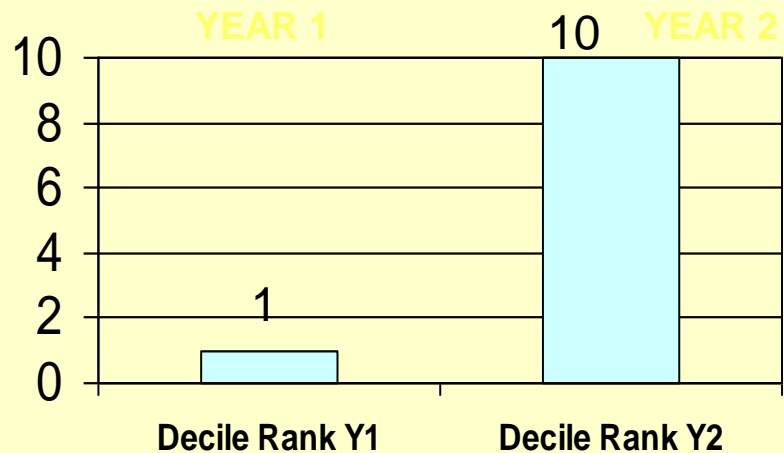
- While test scores have risen in Texas, graduation rates for 9th graders 4 years later are <70% for whites and <50% for African American and Latino students.
- Grade retention and dropouts have also increased in 8th grade.
- Dropout rates have increased in California, Massachusetts, Virginia, NY, and Florida
- U.S. graduation rates have dropped for the first time in a century.

Teaching Effectiveness Depends on Many Factors

- **Teacher knowledge, skills, dispositions, and behaviors** that support the learning process.

Hanushek et al. estimate the individual teacher effects component of measured student achievement is about 7% of the total.
- **Student availability for learning** – Prior learning opportunities, health, supportive home context, attendance, developed abilities
- **Resources for learning** – Curriculum quality, materials, class sizes, specialist supports, etc.
- **Coherence and continuity** – The extent to which content & skills are well organized and reinforced across grades and classes

A Teacher's Measured "Effectiveness" Can Vary Widely Depending on these Factors



- Same high school
- Same course (English I)
- Not a beginning teacher
- Model controls for:
 - Prior achievement
 - Demographics
 - School fixed effects

How Do We Support rather than Punishing Committed Teachers?

- Rigoberto Ruelas
- 14 year veteran of Miramonte Elementary School in Los Angeles
- Beloved by parents and children

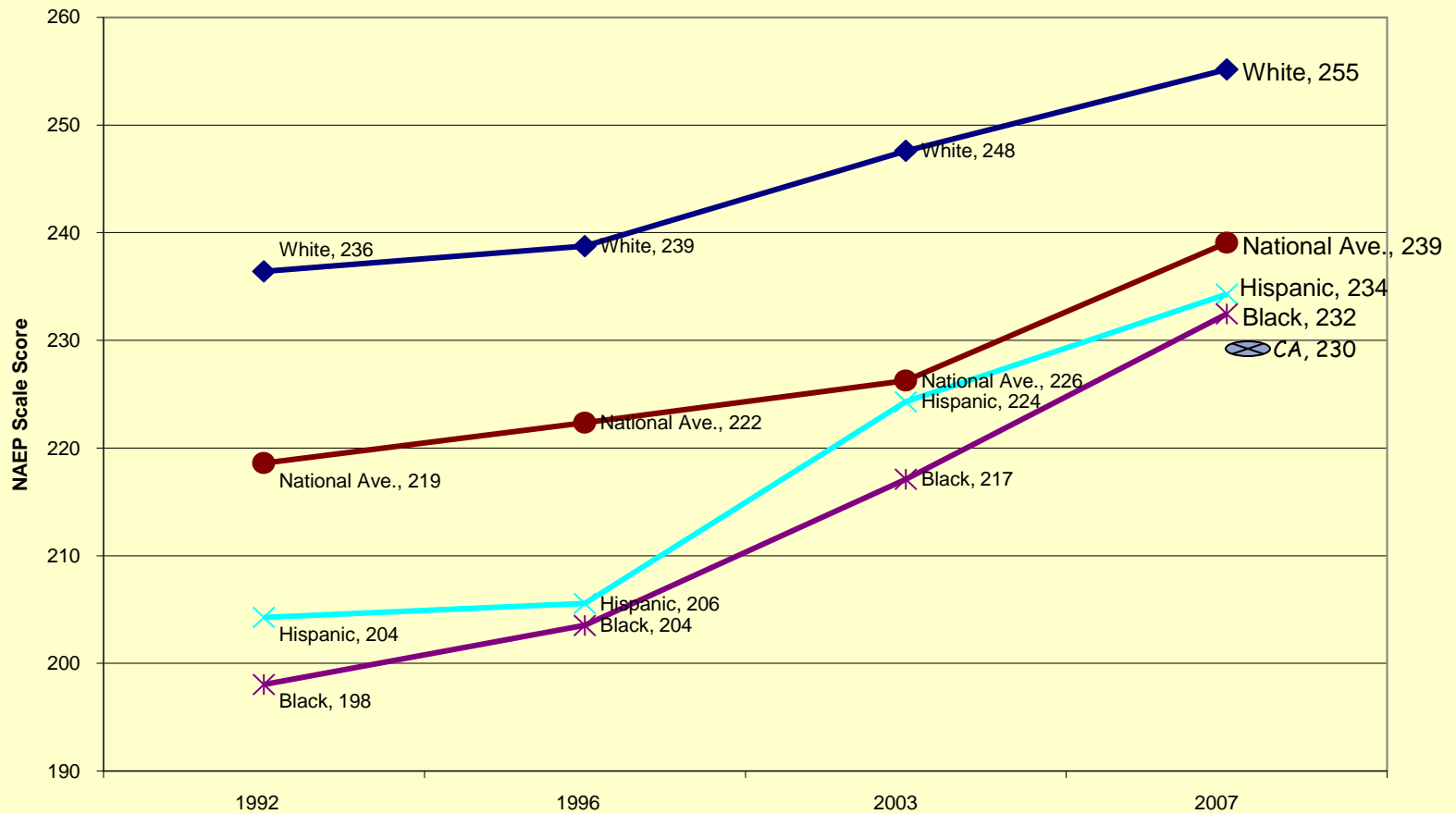


Education Policy for Success in a Global World

- Equalize access to educational resources
- Build a strong, diverse pipeline of well-prepared educators
- Organize a curriculum focused on higher-order thinking and performance within a multi-lingual, multicultural framework
- Reframe accountability to emphasize growth and support for teacher development and thoughtful school improvement

What Happens When States Make Smart and Equitable Investments?

New Jersey Math Achievement Trends 4th Grade NAEP



Source: National Assessment of Educational Progress, NAEP Data Trends

How Might we Get There?

Funding

1. Allocate resources based on student needs and cost of living (weighted pupil formula)
2. Enhance core funding, reduce categoricals

Teachers

3. Invest in scholarships and urban / rural residencies to prepare teachers for high-need schools
4. Redesign licensing and PD to prepare teachers with skills to teach English learners
5. Improve salaries, working conditions, and supports in low-wealth schools

How Might We Get There?

Leaders

6. Create Leadership Development Academies to support principal preparation and development; support mentoring / coaching for school leaders.

Curriculum

Focus on Meaningful Learning

7. Create incentives for personalizing high schools and developing college / career pathways
8. Develop curriculum standards and materials that represent best practices for ELL students

How Might We Get There?

Assessment and Accountability

9. Adopt professional assessment models and practices for all students, including ELL students
10. Create a multiple measures system that includes performance assessments aimed at meaningful learning and diagnostic information
11. Develop 2-way accountability that ensures opportunities to learn and supports for improvement, rather than focusing on sanctions for students and teachers

Insisting on Quality Education as a Civil Right

"On some positions, Cowardice asks the question,
'Is it safe?'

Expediency asks the question, 'Is it politic?'

And Vanity comes along and asks the question,
'Is it popular?'

But Conscience asks the question 'Is it right?'

And there comes a time when one must take a position
that is neither safe, nor politic, nor popular,

But he must do it because Conscience tells him
it is right."

-Martin Luther King, Jr., "Remaining Awake Through a
Great Revolution", March 31, 1968