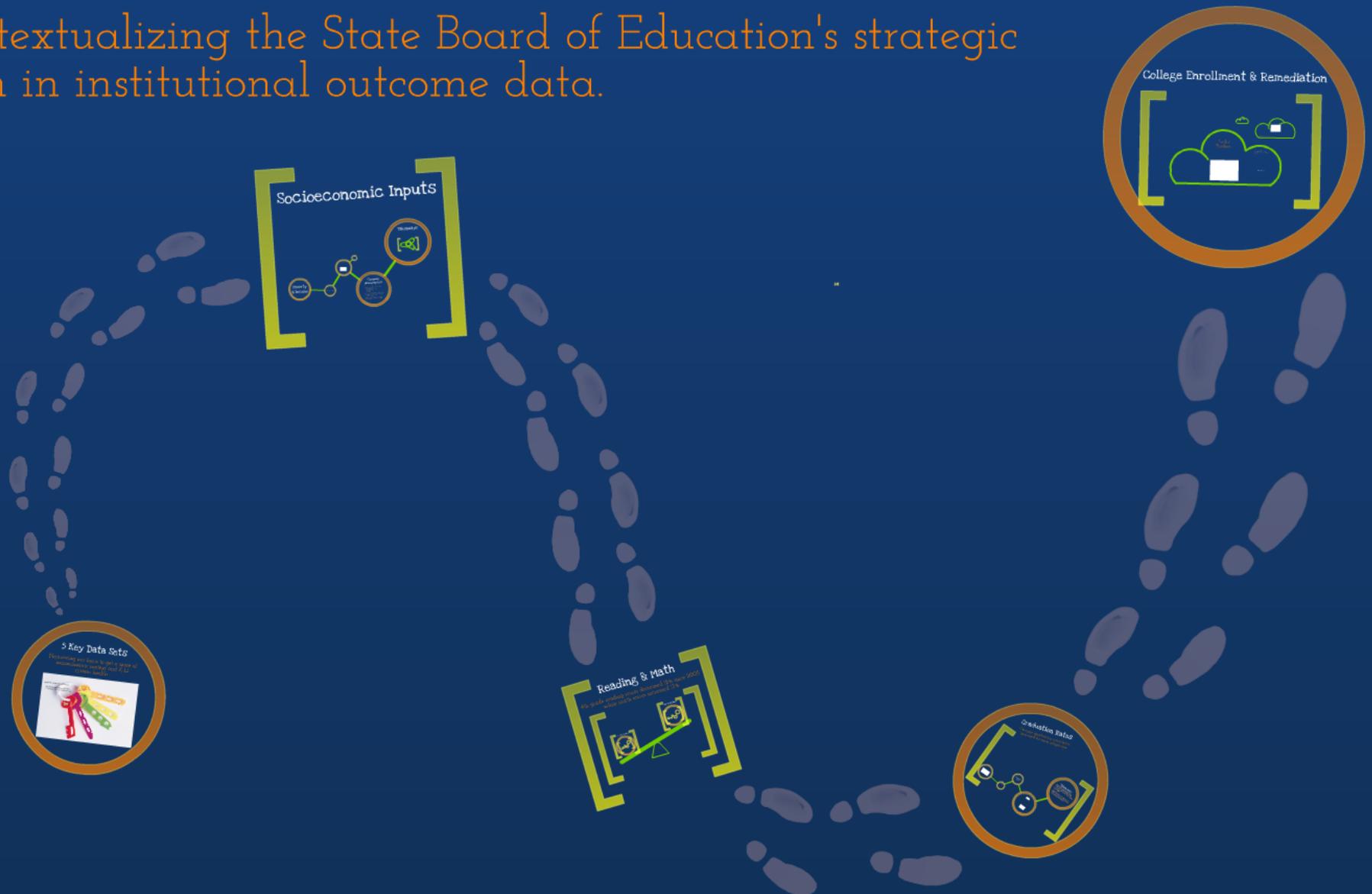


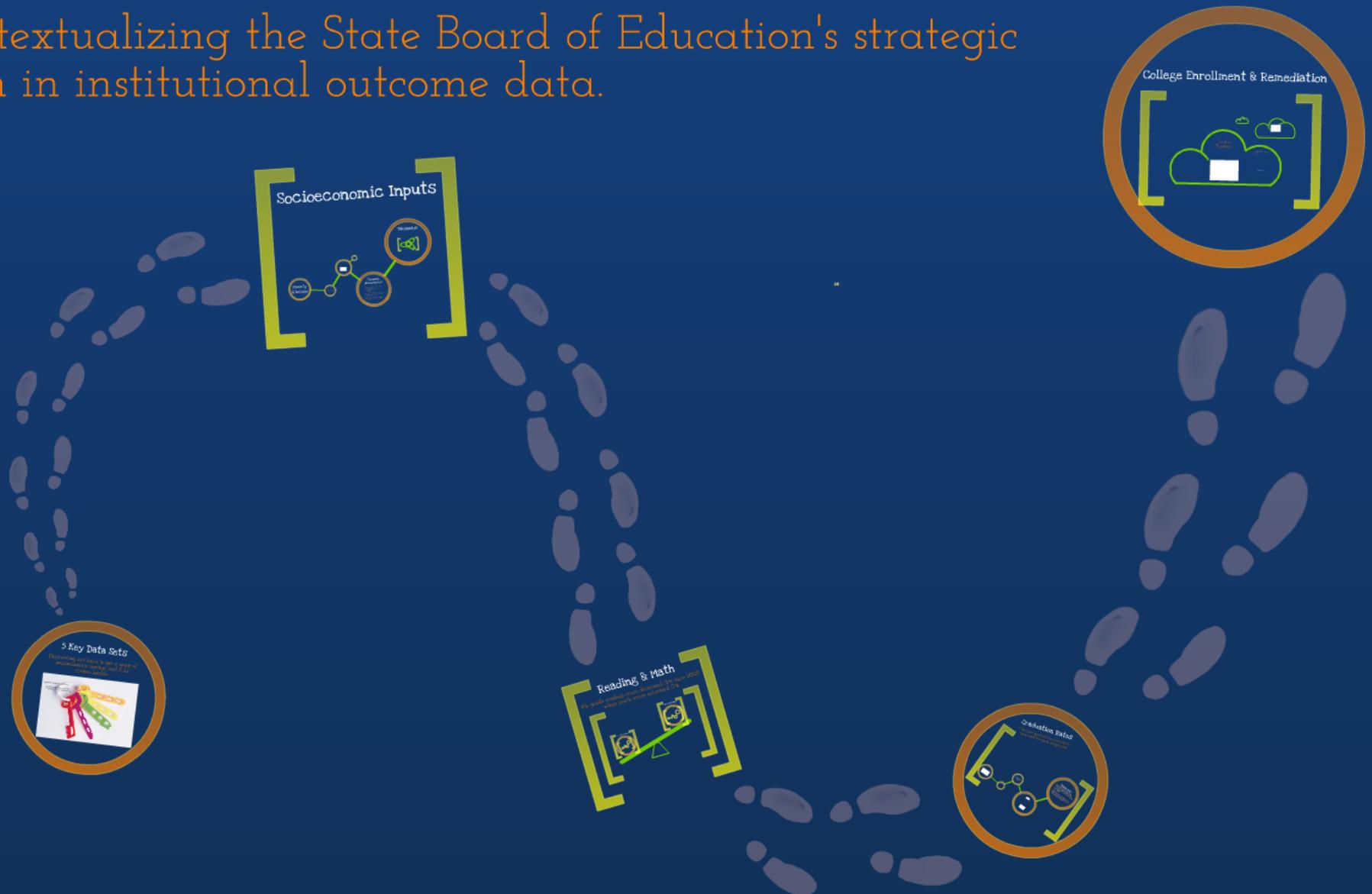
A walk through Washington's K-12 System Data

Contextualizing the State Board of Education's strategic plan in institutional outcome data.



A walk through Washington's K-12 System Data

Contextualizing the State Board of Education's strategic plan in institutional outcome data.



5 Key Data Sets

Narrowing our focus to get a sense of socioeconomic context and K-12 system health.



Linking to these themes in our strategic plan:

- Closing the achievement (opportunity) gap.
- Strengthening transitions in the P-13 system.

College Enrollment & Remediation

Supporting students' college enrollment and persistence is a key goal of the strategic plan. The plan includes several strategies to support students' college enrollment and persistence, including providing information and resources to help students make informed decisions about college enrollment and persistence.

SEP 2023

Graduation Rates

Supporting students' graduation rates is a key goal of the strategic plan. The plan includes several strategies to support students' graduation rates, including providing information and resources to help students make informed decisions about graduation and providing support to students who are at risk of not graduating.

SEP 2023

8th Grade Math

Supporting students' 8th grade math performance is a key goal of the strategic plan. The plan includes several strategies to support students' 8th grade math performance, including providing information and resources to help students make informed decisions about 8th grade math and providing support to students who are at risk of not performing well in 8th grade math.

SEP 2023

4th Grade Reading

Supporting students' 4th grade reading performance is a key goal of the strategic plan. The plan includes several strategies to support students' 4th grade reading performance, including providing information and resources to help students make informed decisions about 4th grade reading and providing support to students who are at risk of not performing well in 4th grade reading.

SEP 2023

Socioeconomic Inputs

What does looking like this school?

- Income
- Family
- Language
- Health
- Education

SEP 2023

Socioeconomic Inputs



What do our kids bring with them to school?

- Income
- Poverty
- Demographics

Kids Count & OFM

4th Grade Reading

- Allows us to put state assessment data in perspective - comparable to the 4th grade reading National Assessment of Educational Progress (NAEP)
- Provides valuable information about students' literacy levels and ability to access content in middle school.

OSPI and NCES

8th Grade Math

- Again - allows us to put state assessment data in perspective by comparing to the 8th grade math National Assessment of Educational Progress (NAEP)
- Provides valuable information about students' basic math skills and ability to access STEM content opportunities in high school.

OSPI and NCES

Graduation Rates

- Tell us if and which students will be able to access postsecondary opportunities.

OSPI and USED

College Enrollment & Remediation

- College enrollment data tell us if and which students enroll in postsecondary education - this is becoming increasingly necessary to compete for jobs in Washington State.
- Rates of pre-college or remedial course taking tell us how well our K-12 system prepares students for the post-secondary opportunities of two and four year colleges.

NCHEMS, IMF, ERDC

5 Key Data Sets

Narrowing our focus to get a sense of socioeconomic context and K-12 system health.



Socioeconomic Inputs



Poverty & Income

Children living in poverty

Remember, for a household of 4, the poverty guideline is a household income of \$23,050.

Washington's rate of children living in poverty
increased 27% between 2008 and 2010.

(14.3% to 18.2%)

Median Family Income

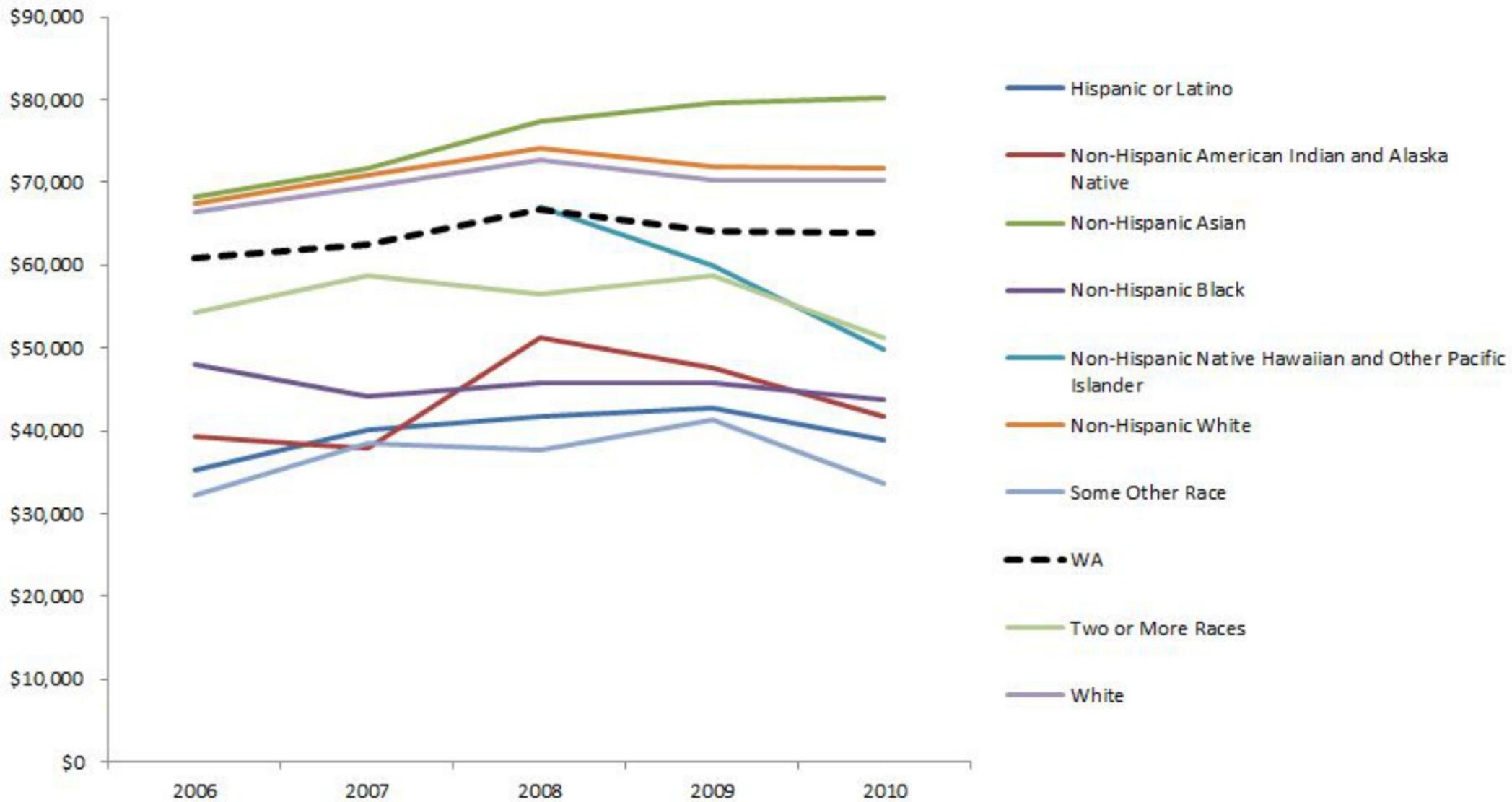
Washington's median family income decreased less during the recession and remains higher than the nation's.

Washington's Median Family Income Decreases Less than Nation



But we know opportunity gaps exist.

WA Median Family Income - Disaggregated by Race and Ethnicity

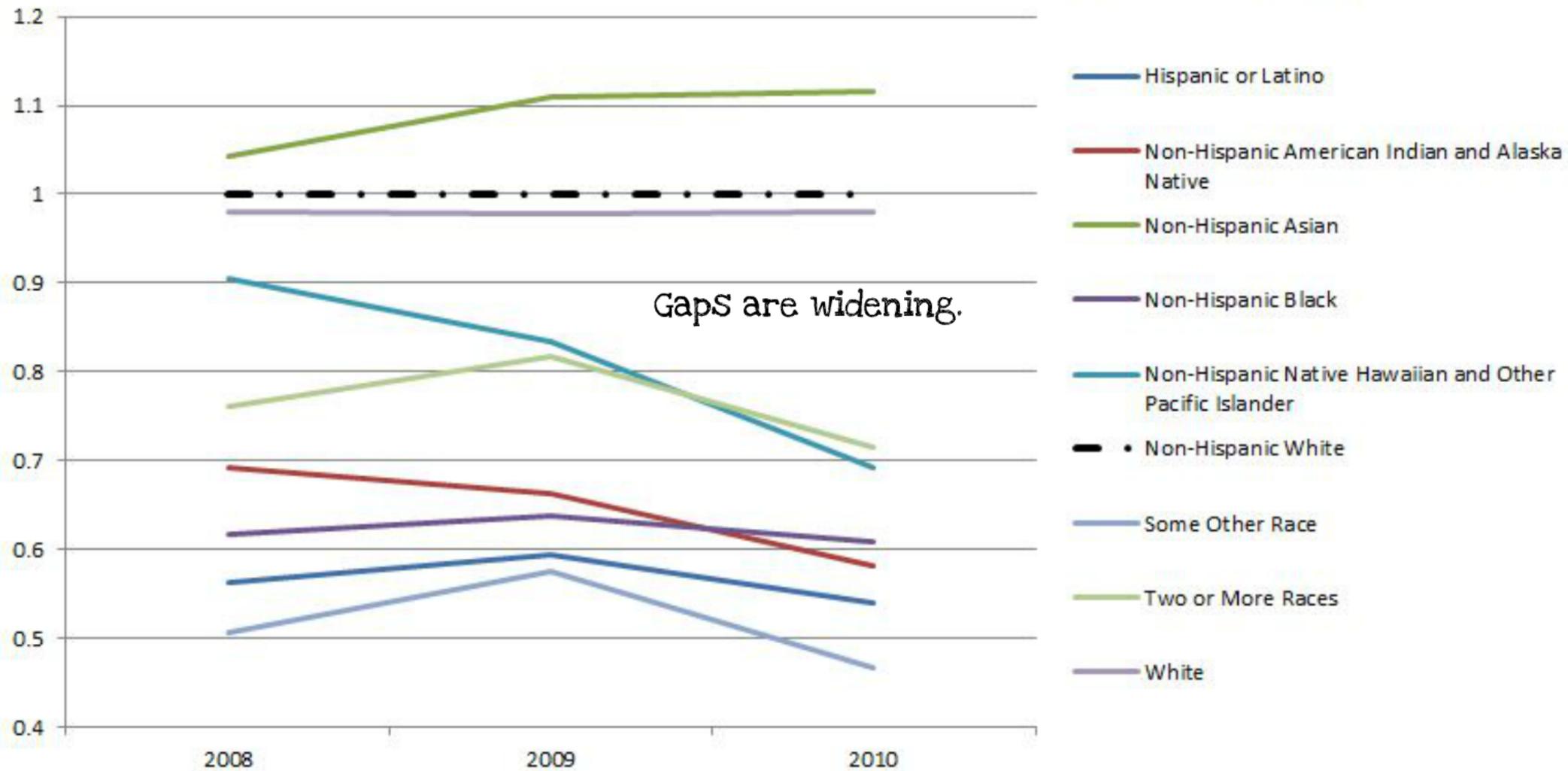


We wanted to
focus on the gaps,
so we used ratios.



<i>Subgroup</i>
<i>(Non – Hispanic) White</i>

WA Median Family Income - Ratios Focus on Opportunity Gaps



Changing demographics

- The 3 racial/ethnic subgroup student populations expected to increase the most by 2030 are:
 - Bi-racial and multi-racial students by 85%
 - Asian/Pacific Islanders by 53%
 - Hispanics by 28%
- The counties in central and eastern Washington that are projected to have the largest school age populations in 2020 also have some of the highest child poverty rates in the state.
- In-migration is expected to increase over the next 20 years and account for slightly more than half of overall population growth.

Takeaways

The economic recession continues to disproportionately impact children and families of color.

Some of our most under-served subgroup student populations are expected to increase by more than 25% over the next 20 years.

Counties with the largest child poverty rates are projected to experience the greatest percent increase in their student populations.



The economic recession continues to disproportionately impact children and families of color.

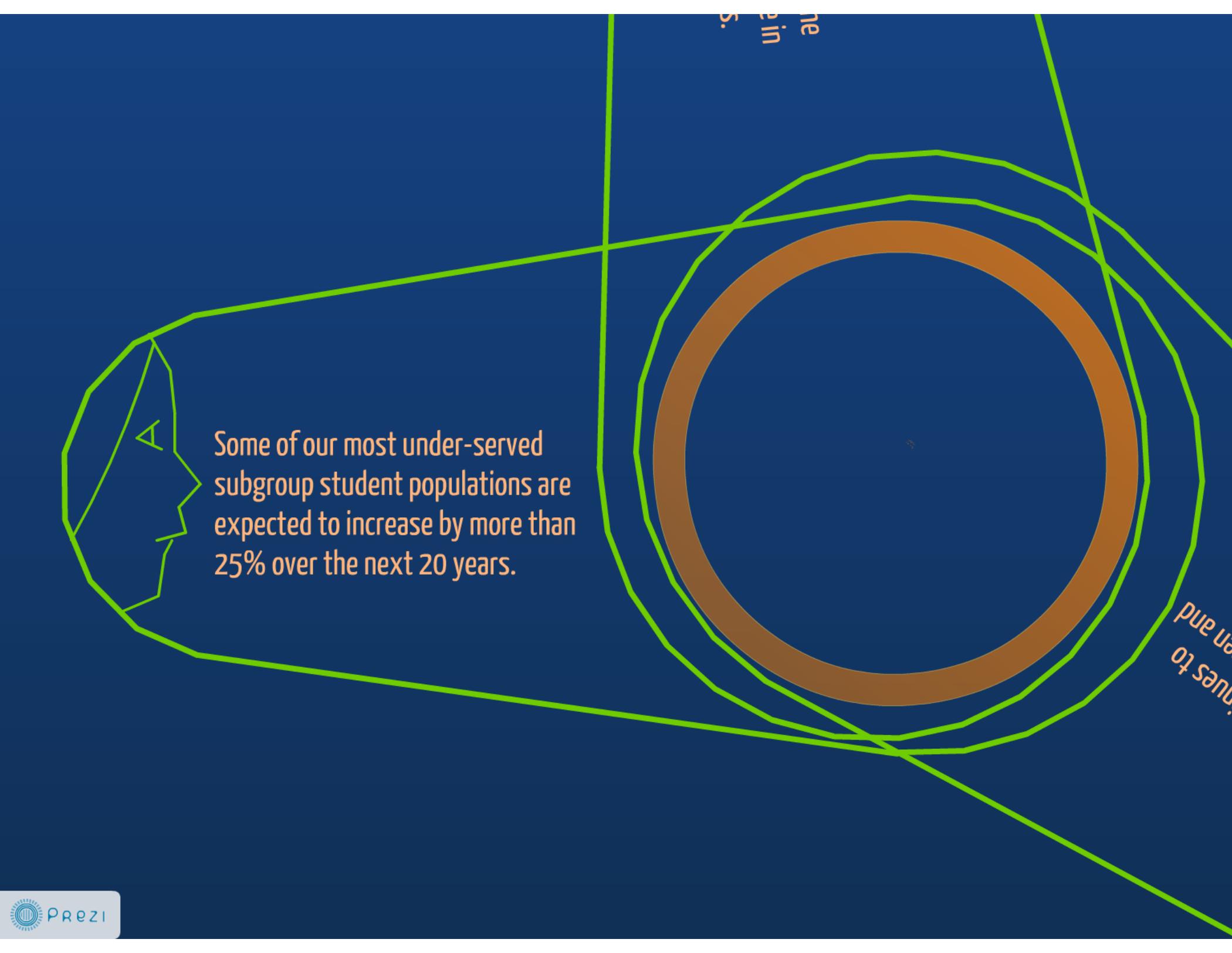
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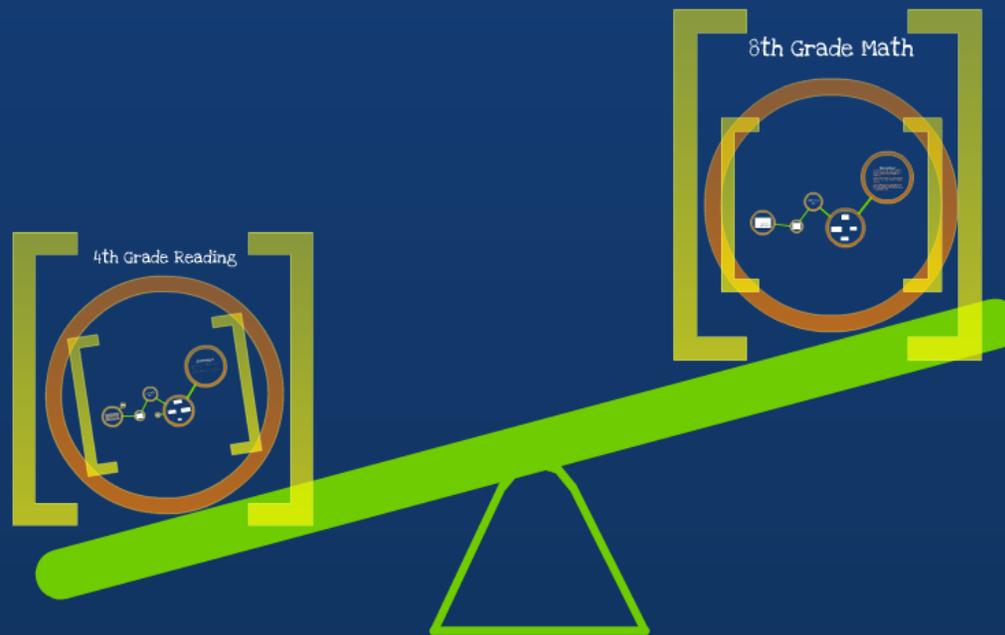


Some of our most under-served subgroup student populations are expected to increase by more than 25% over the next 20 years.

Are we
ready?

Reading & Math

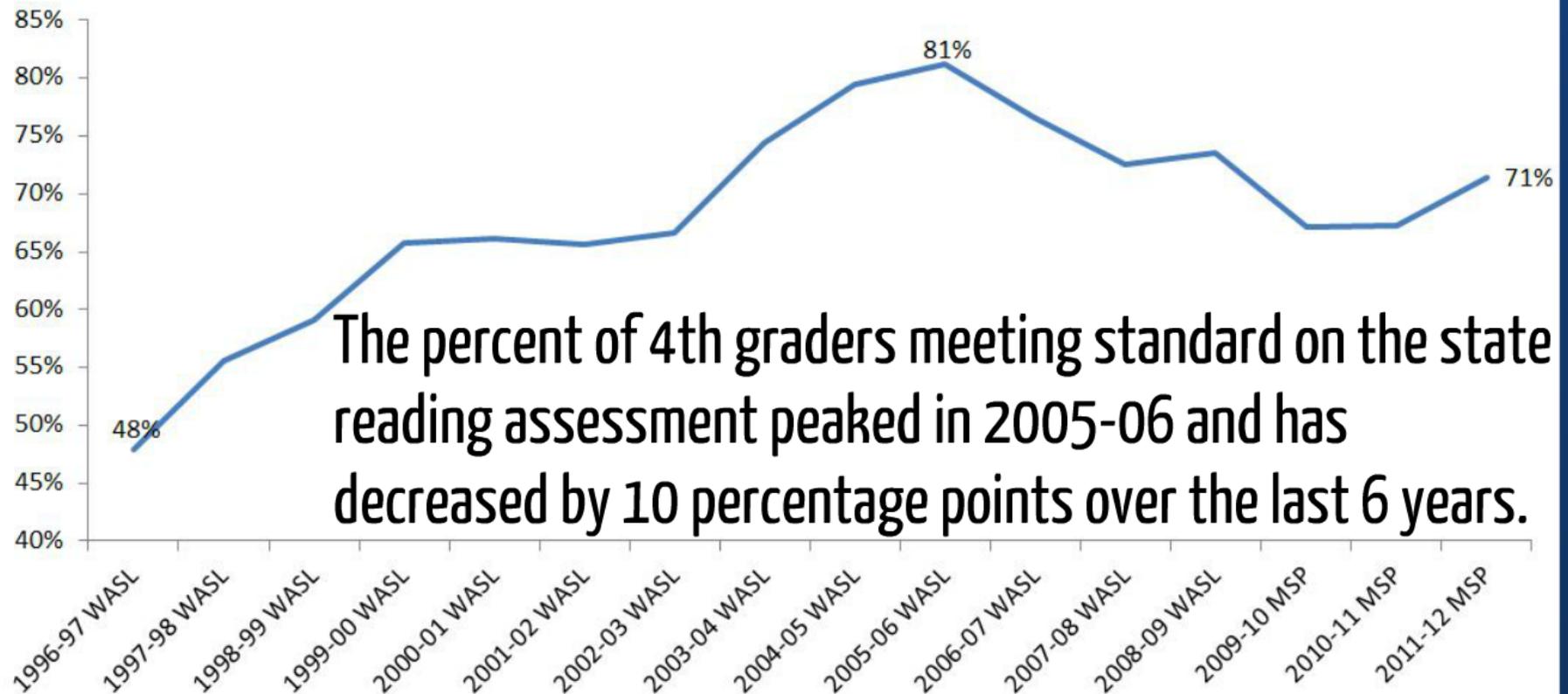
4th grade reading scores decreased 12% since 2005 while math scores increased 13%.



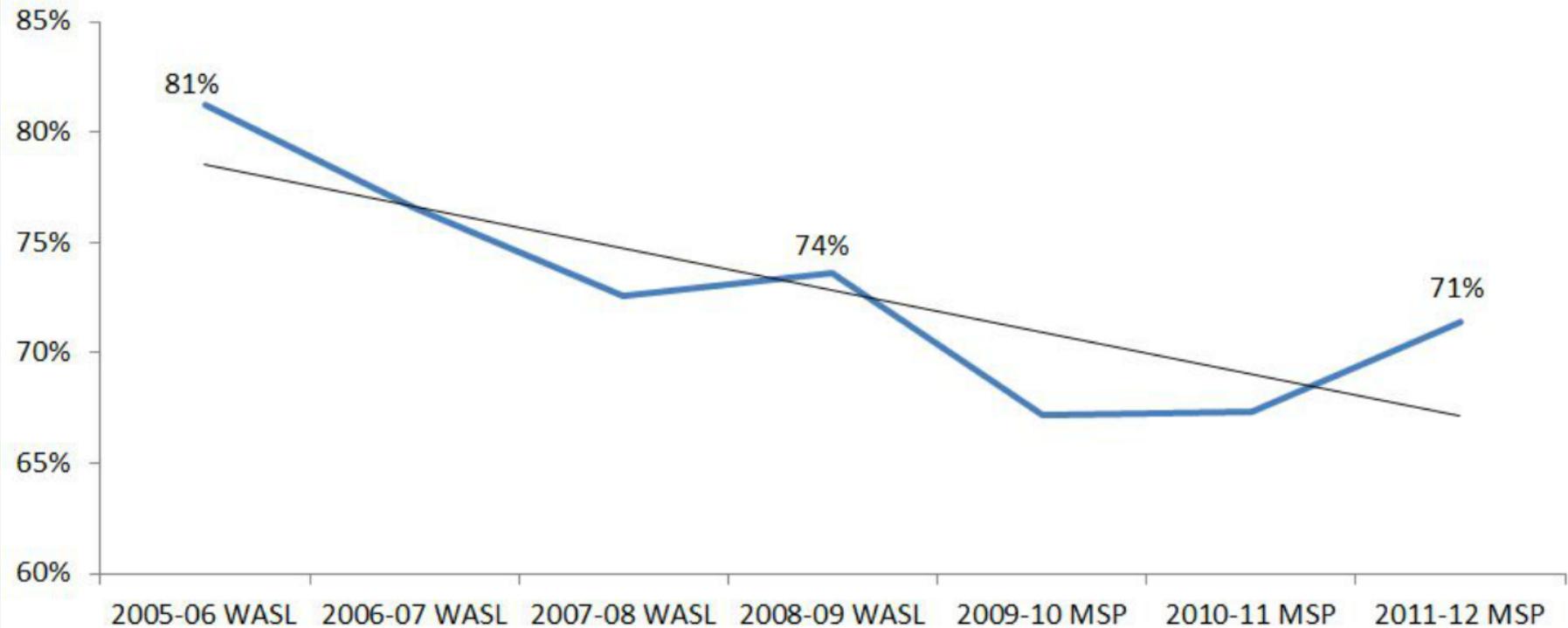
4th Grade Reading



4th Grade Reading - 1996 through 2012



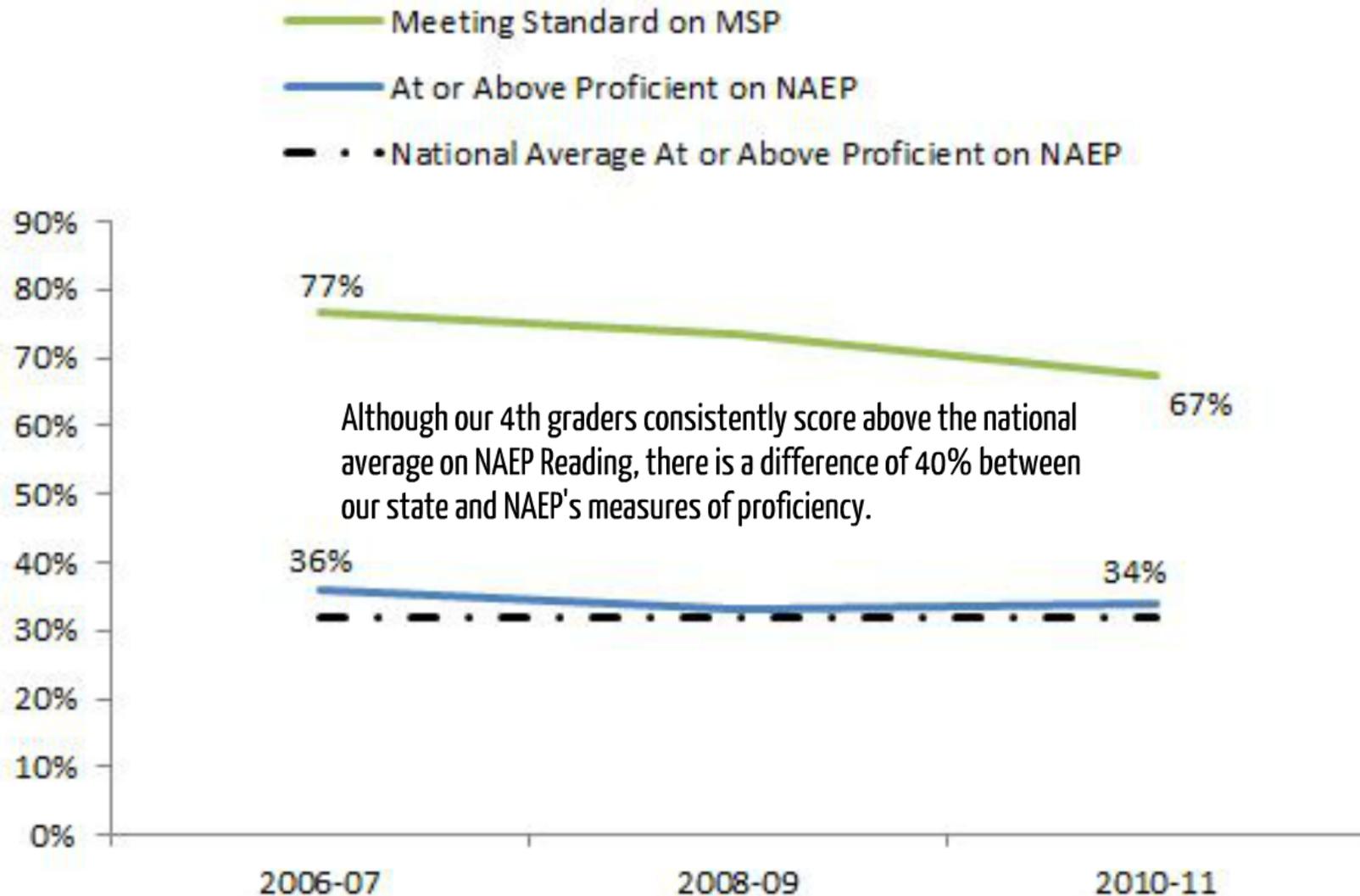
4th Grade Reading - 2005 through 2012



If this trend continues, by 2022 we will have lost all of the gains we've made in 4th grade Reading since we began testing in 1996.

National Context

4th Grade Reading - MSP & NAEP

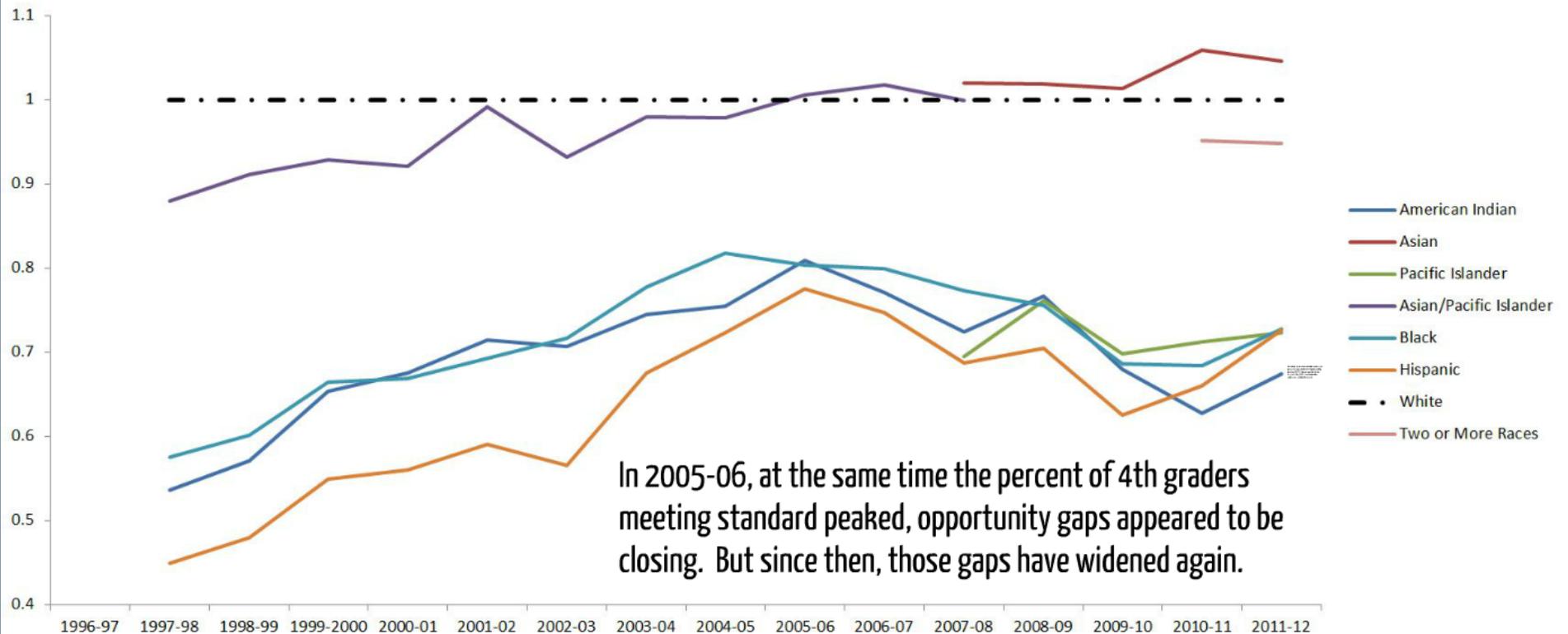




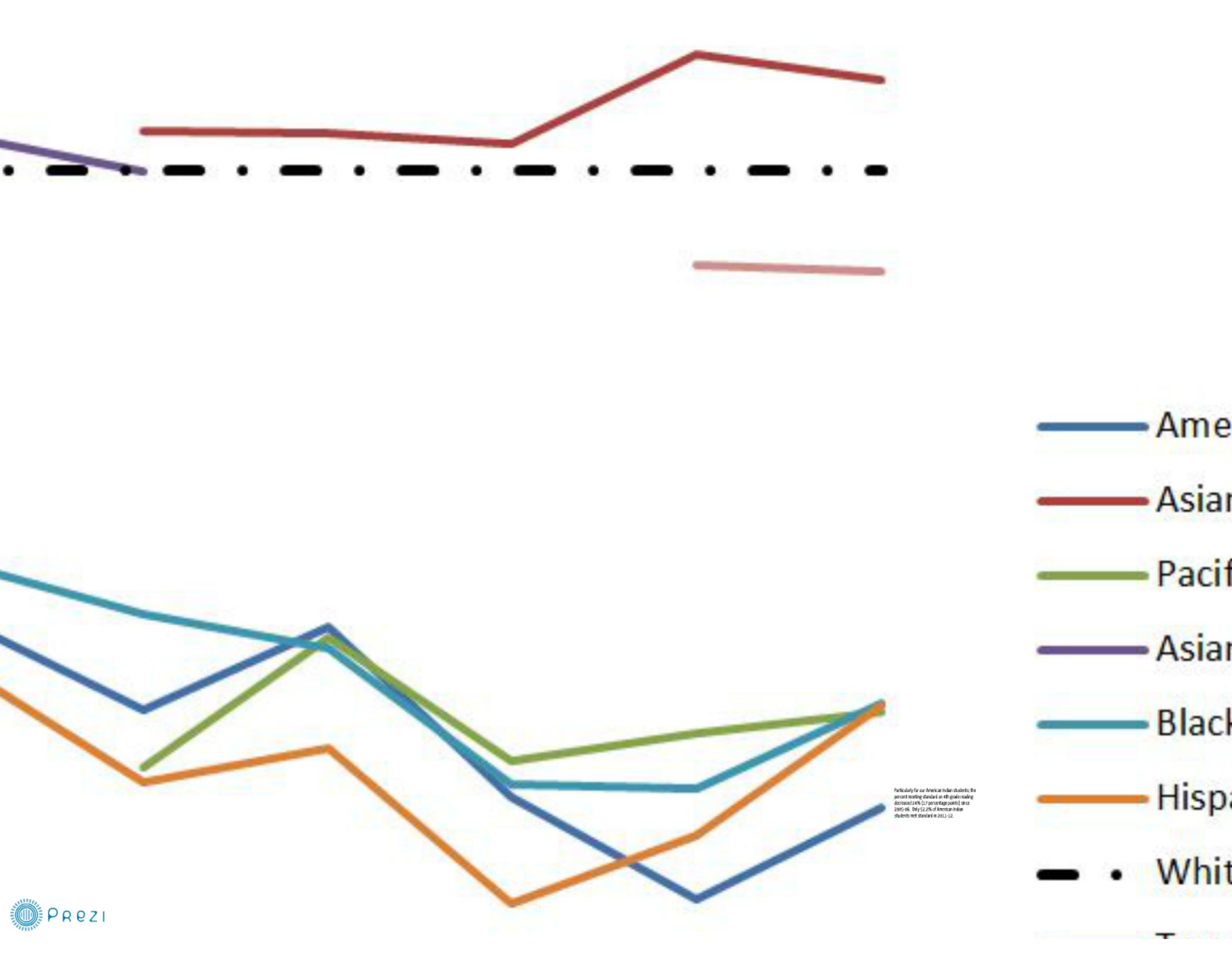
Opportunity
gaps?

Race/Ethnicity

4th Grade Reading - Ratios focus on opportunity gaps



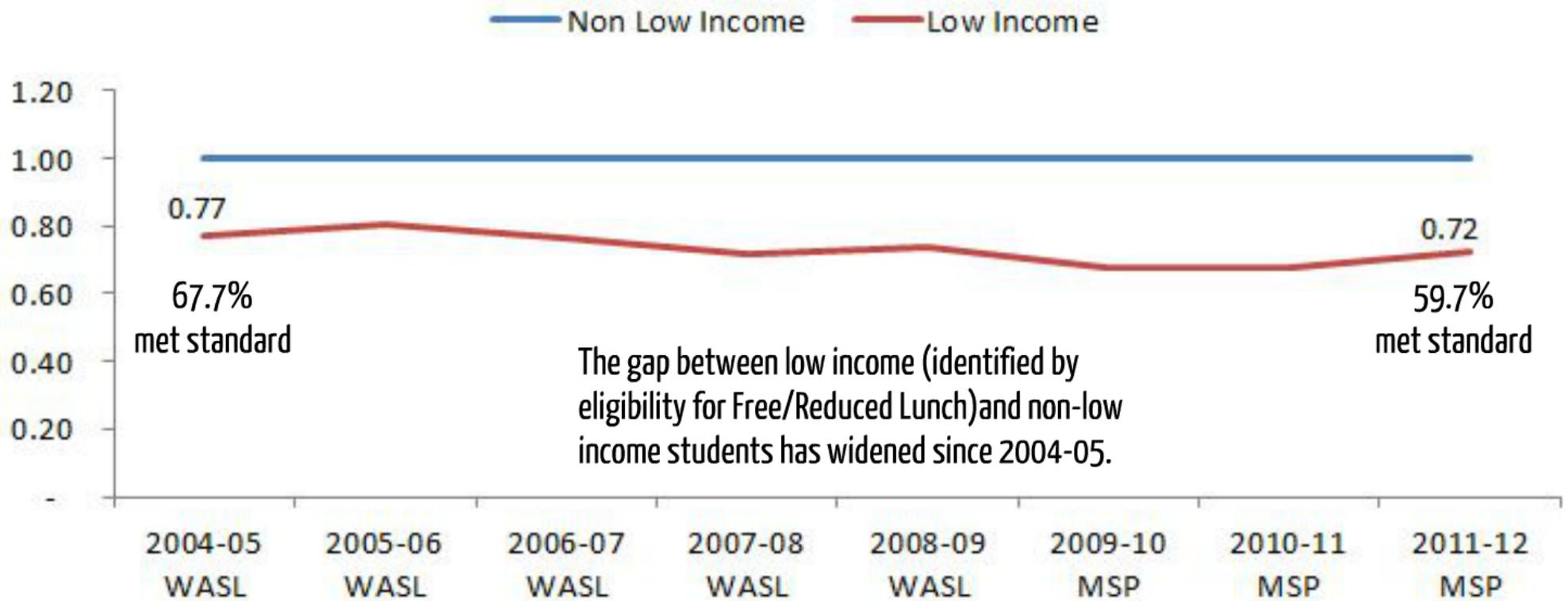
Particularly for our American Indian students; the percent meeting standard on 4th grade reading decreased 24% (17 percentage points) since 2005-06. Only 52.2% of American Indian students met standard in 2011-12.



- Ame
- Asian
- Pacif
- Asian
- Black
- Hispa
- Whit

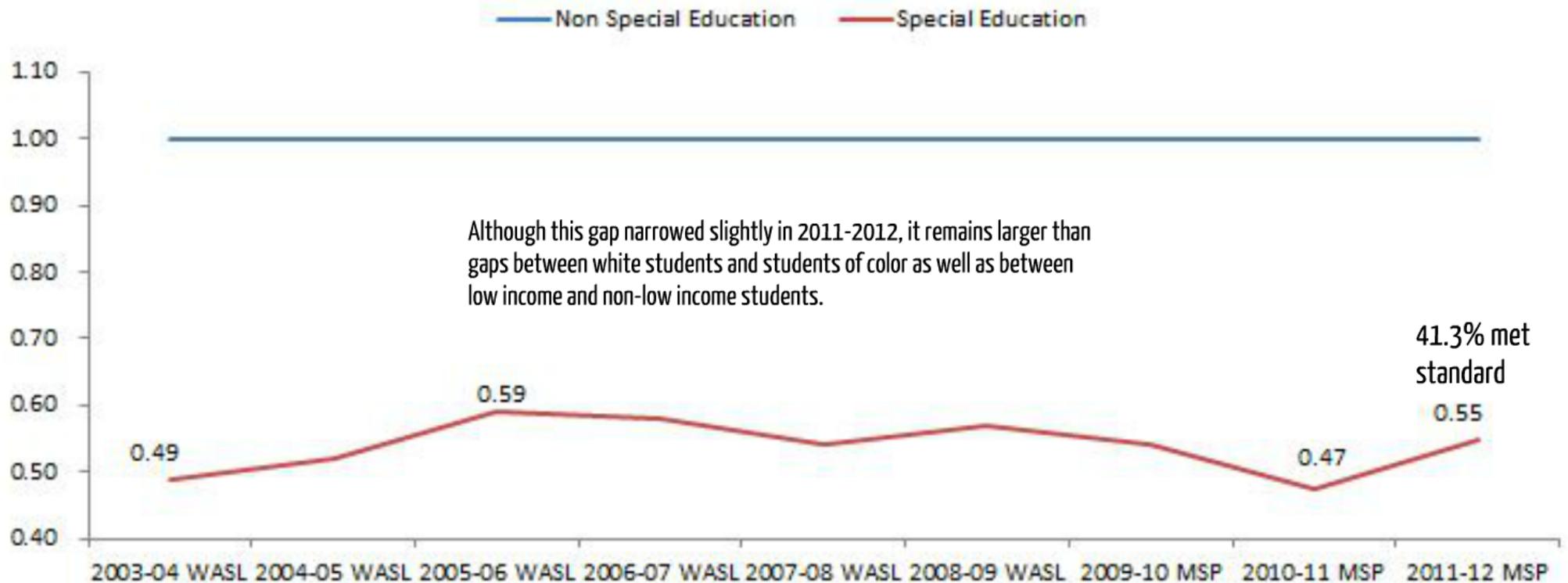
Income

4th Grade Reading - Ratio of Low Income to Non-low Income



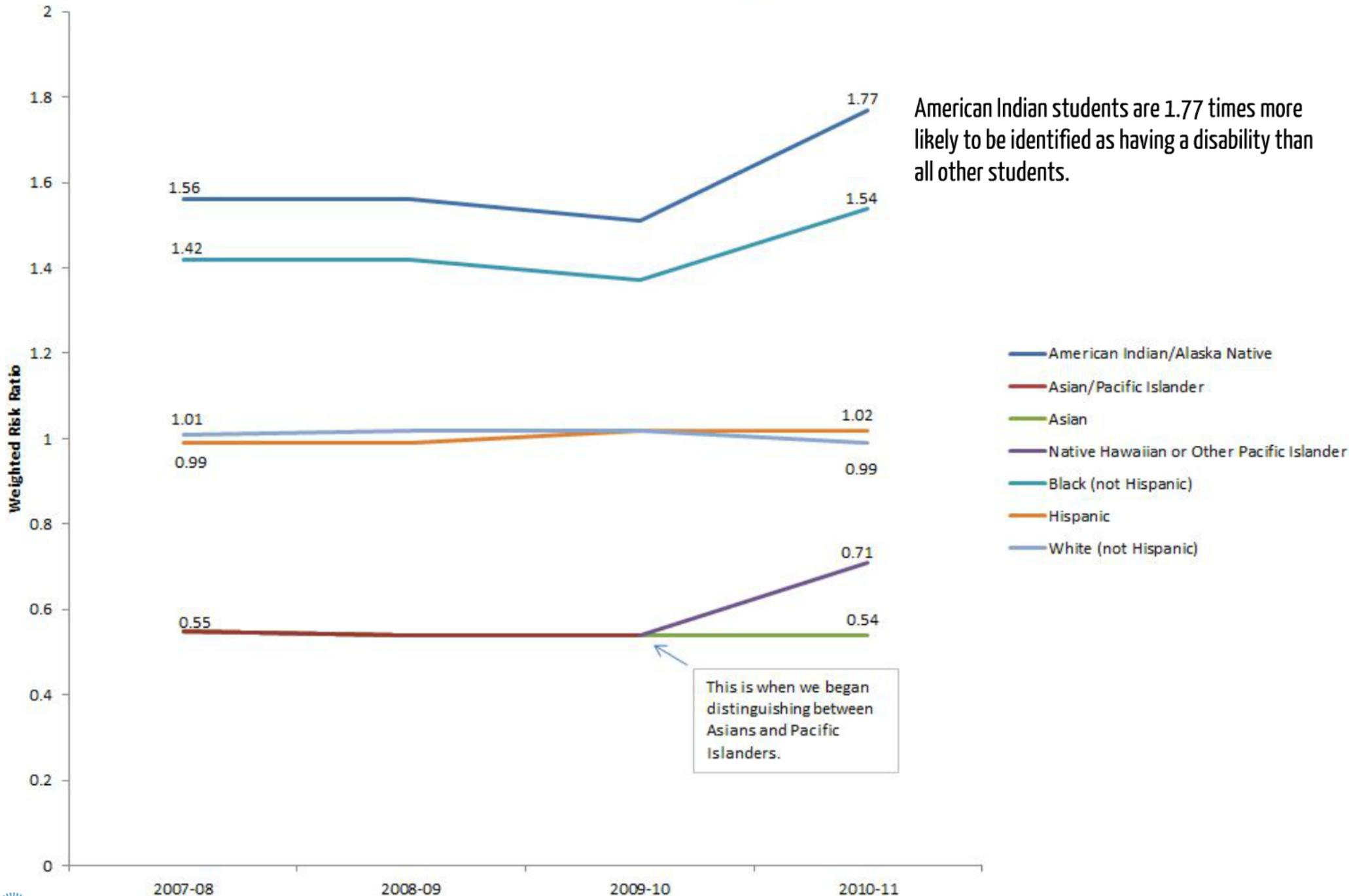
Students with Disabilities

4th Grade Reading - Special Education to Non-Special Education



American Indian and Black students are increasingly overrepresented in special education.

Representation of Students of Color in Special Education 2007-2011

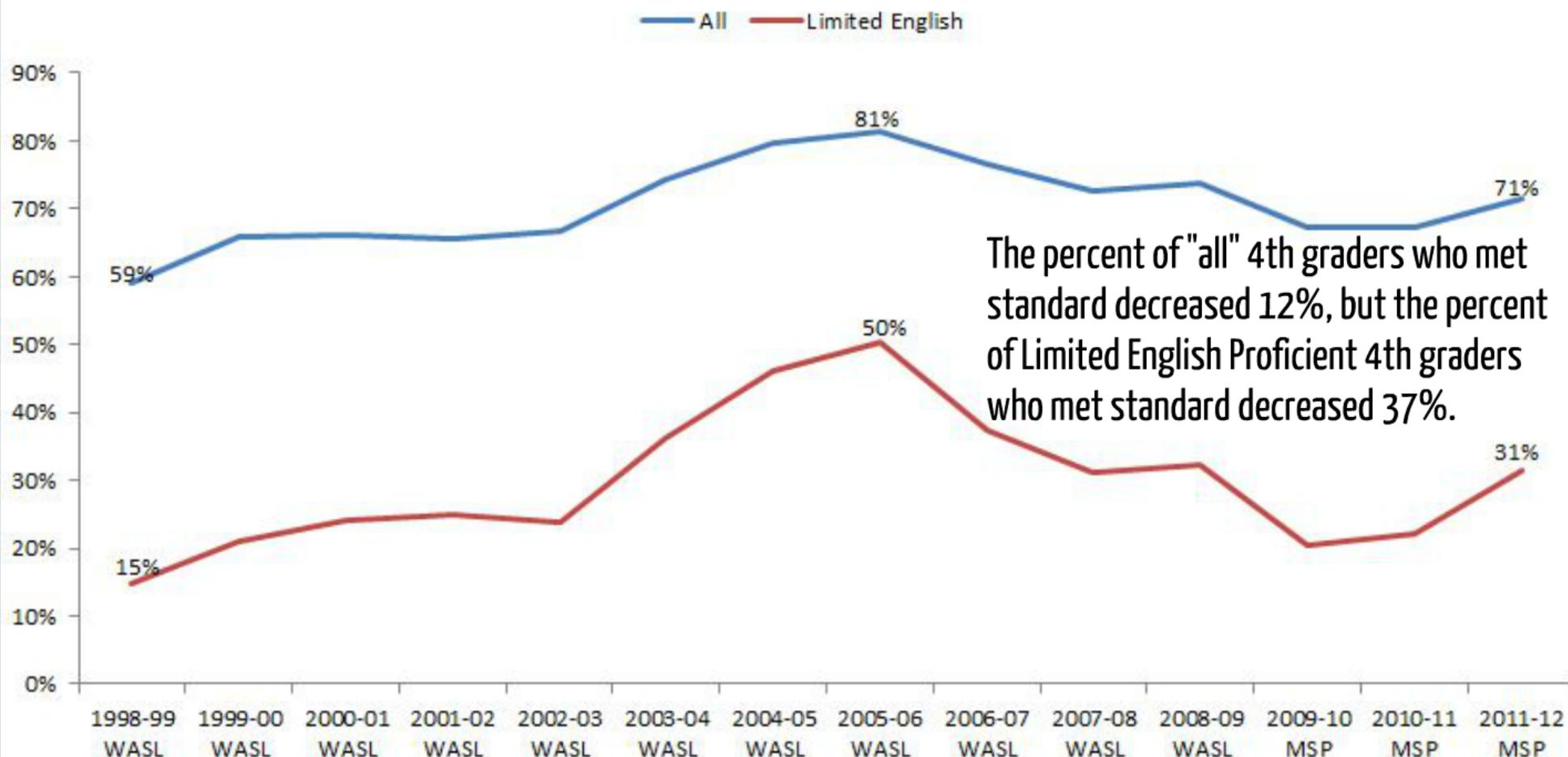


American Indian students are 1.77 times more likely to be identified as having a disability than all other students.

- American Indian/Alaska Native
- Asian/Pacific Islander
- Asian
- Native Hawaiian or Other Pacific Islander
- Black (not Hispanic)
- Hispanic
- White (not Hispanic)

English Language Learners

4th Grade Reading - All & Limited English Proficiency



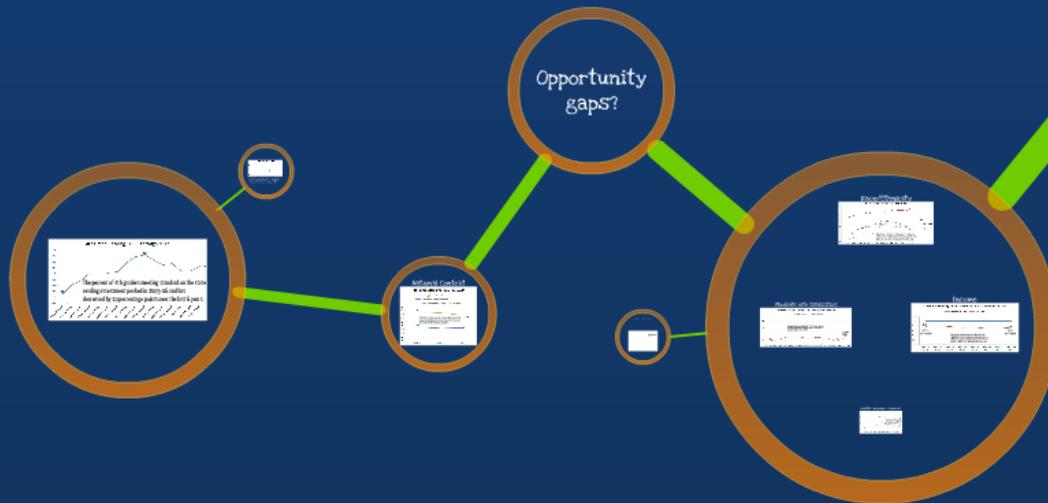
Takeaways:

- We need to know more about change(s) that took place around 2005, which could explain the peak and subsequent decrease in 4th graders meeting standard.
- Whatever the cause(s) may be for the drop in 4th grade reading scores, our most under-served subgroups are being disproportionately impacted.

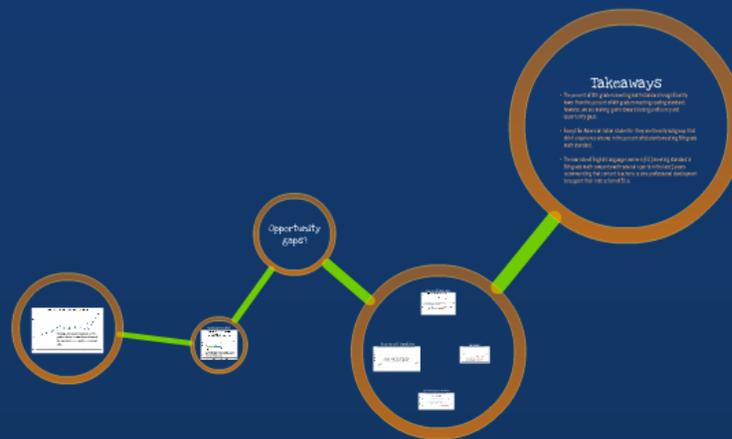
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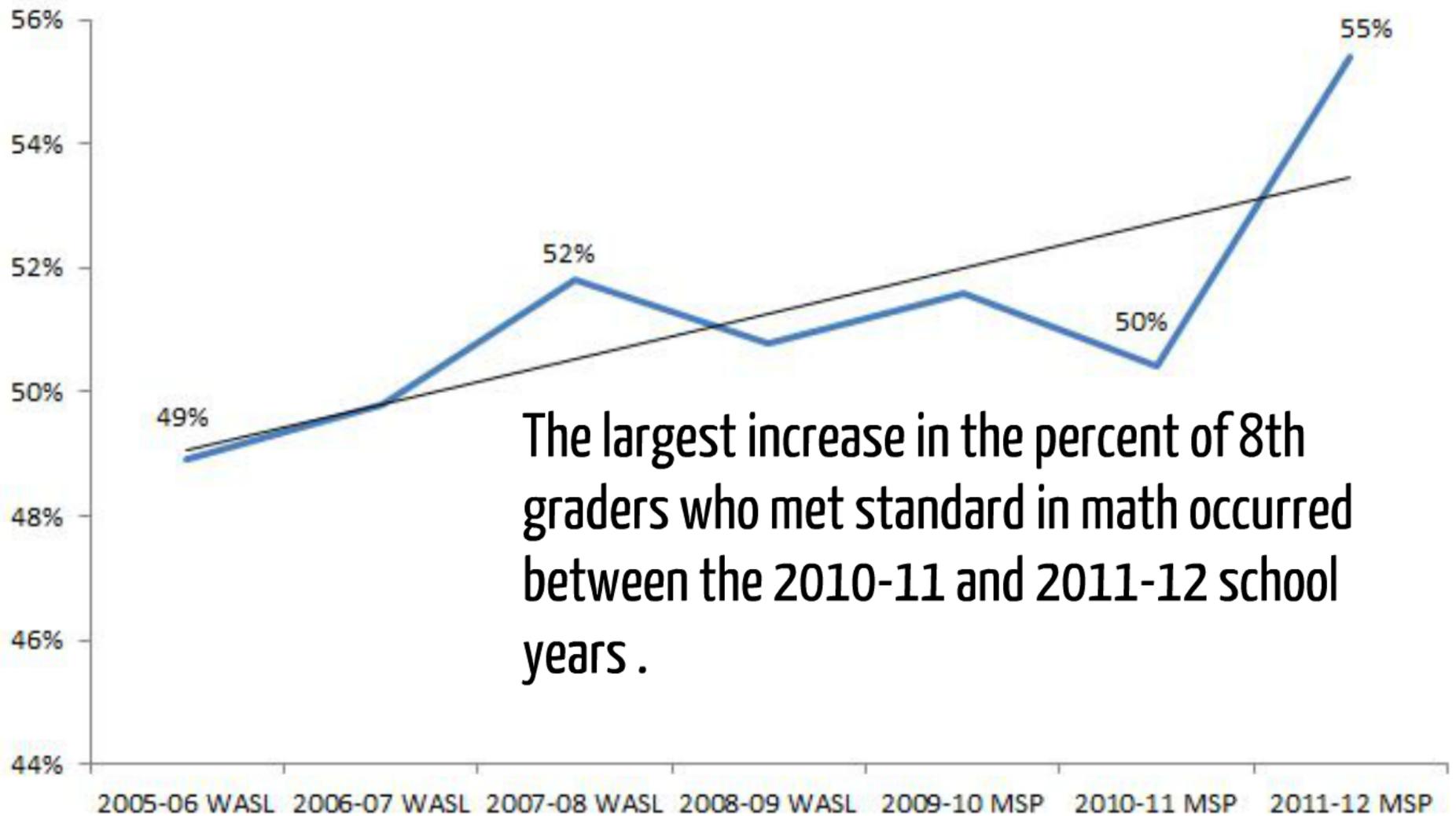
Opportunity gaps?



8th Grade Math

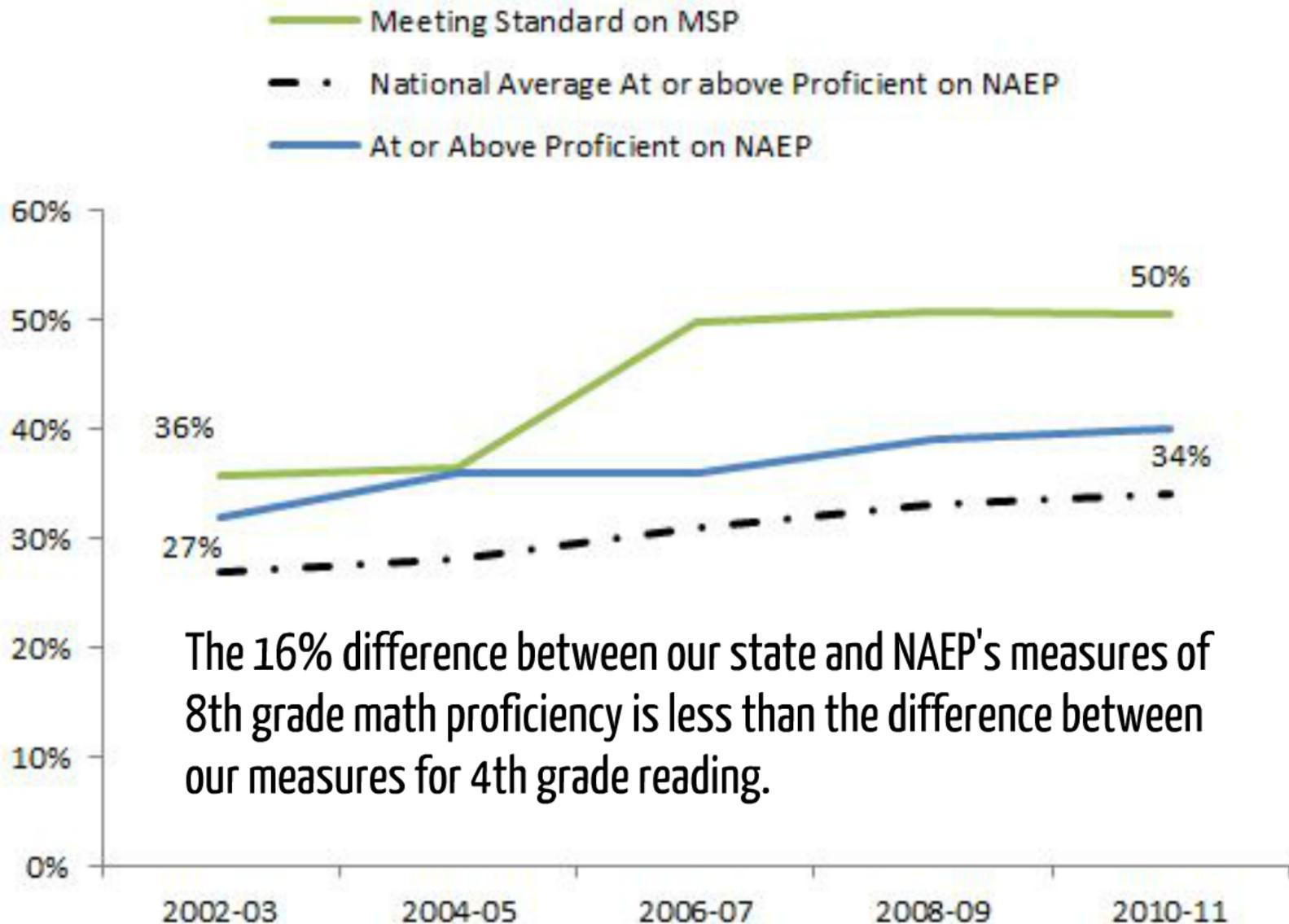


8th Grade Math - 2005 through 2012



National Context

8th Grade Math - MSP & NAEP

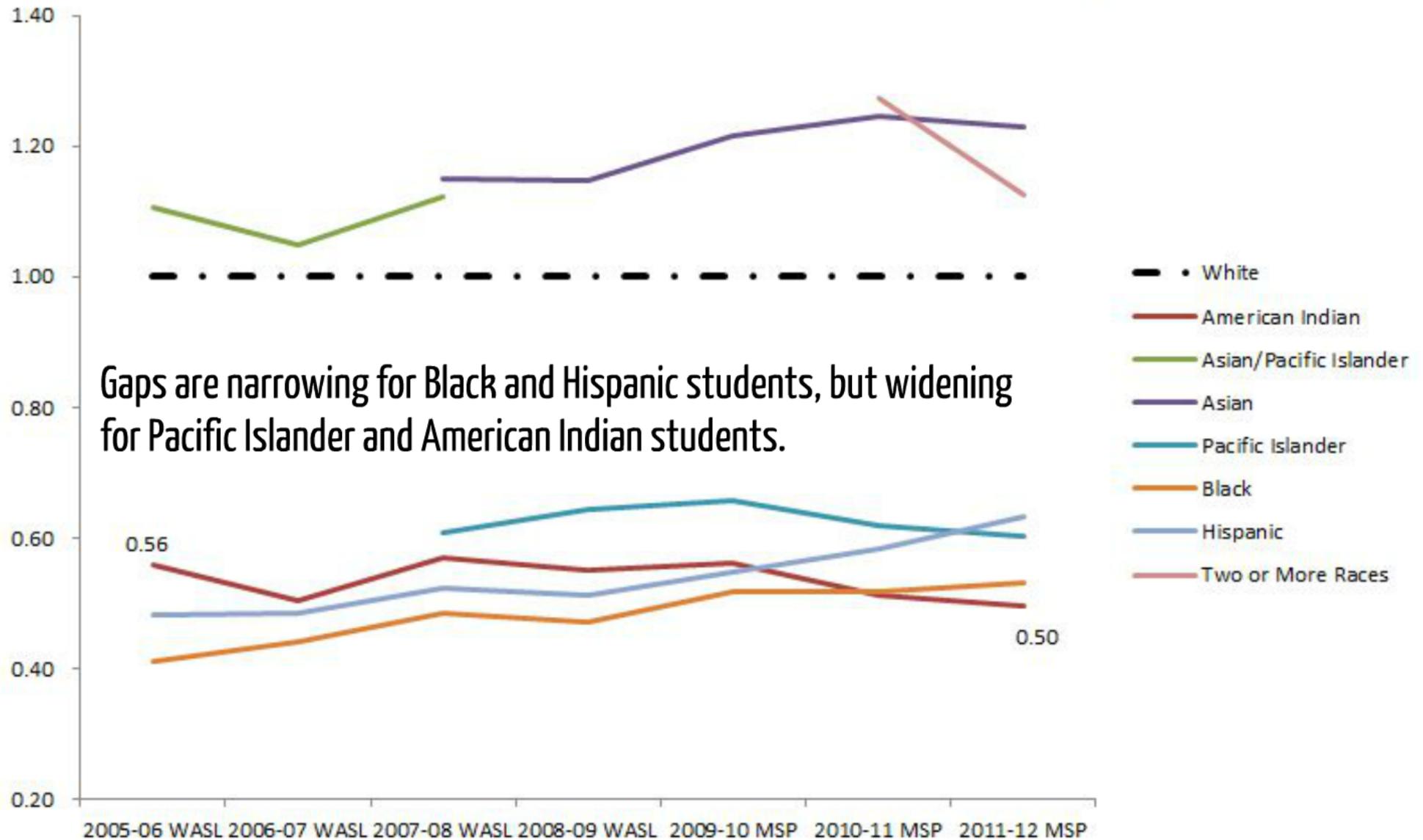




Opportunity
gaps?

Race/Ethnicity

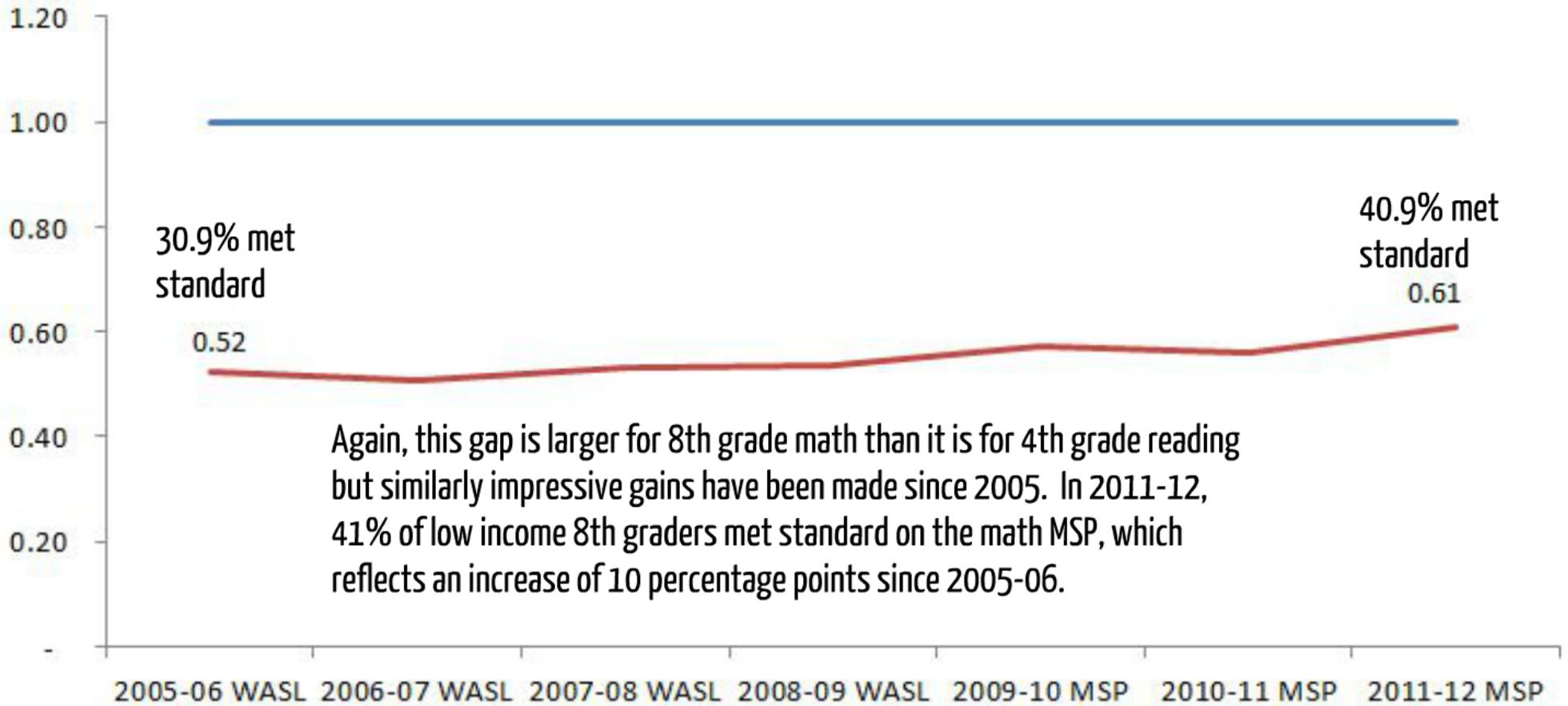
8th Grade Math - Ratios focus on opportunity gaps



Income

8th Grade Math - Ratio of Low Income to Non-low Income

— Non Low Income — Low Income

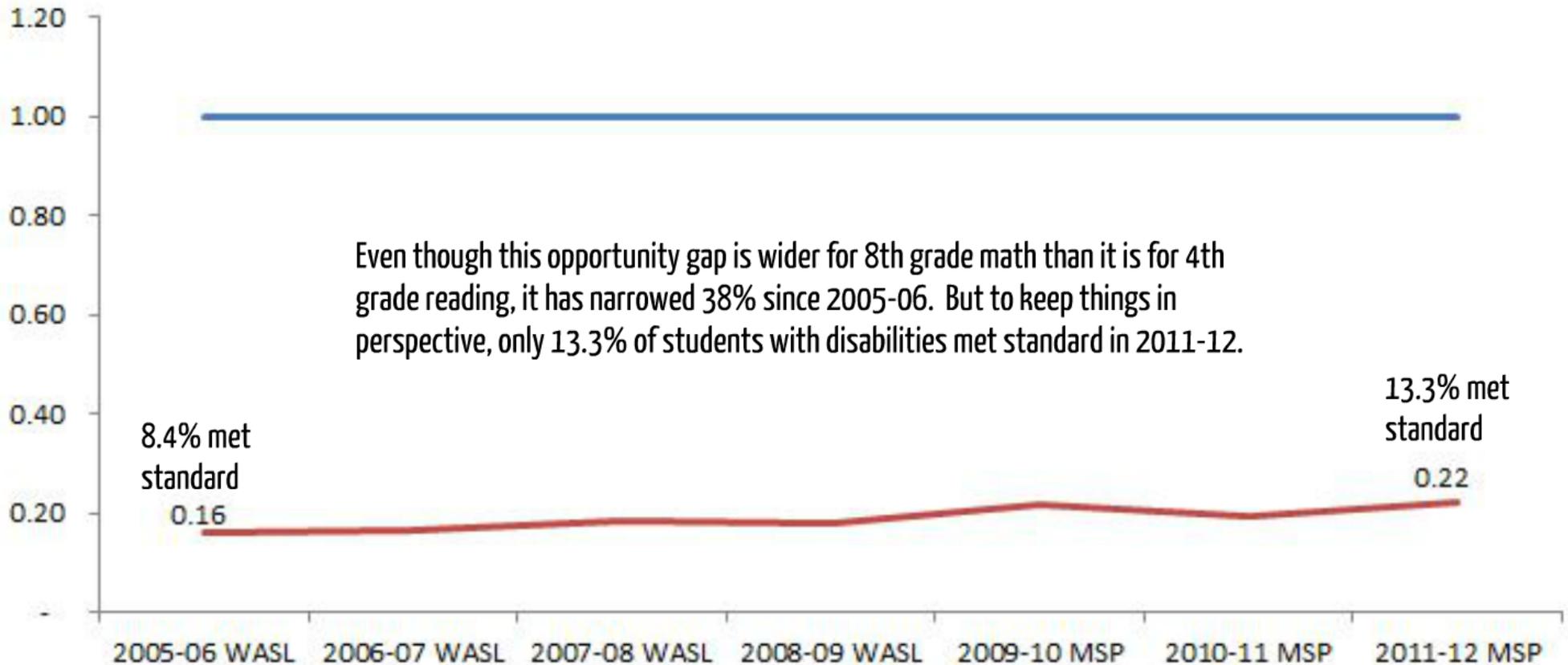


Again, this gap is larger for 8th grade math than it is for 4th grade reading but similarly impressive gains have been made since 2005. In 2011-12, 41% of low income 8th graders met standard on the math MSP, which reflects an increase of 10 percentage points since 2005-06.

Students with Disabilities

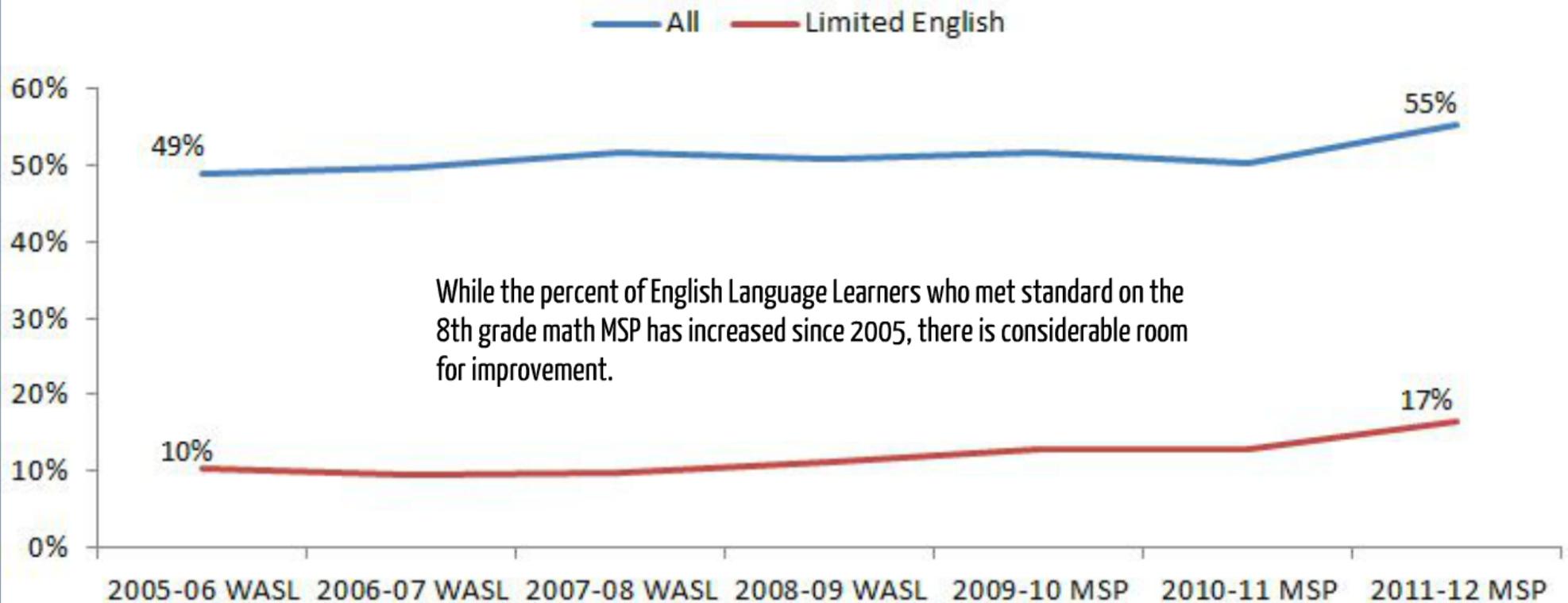
8th Grade Math - Ratio of Special Education to Non-Special Education

— Non Special Education — Special Education



English Language Learners

8th Grade Math - All & Limited English Proficient

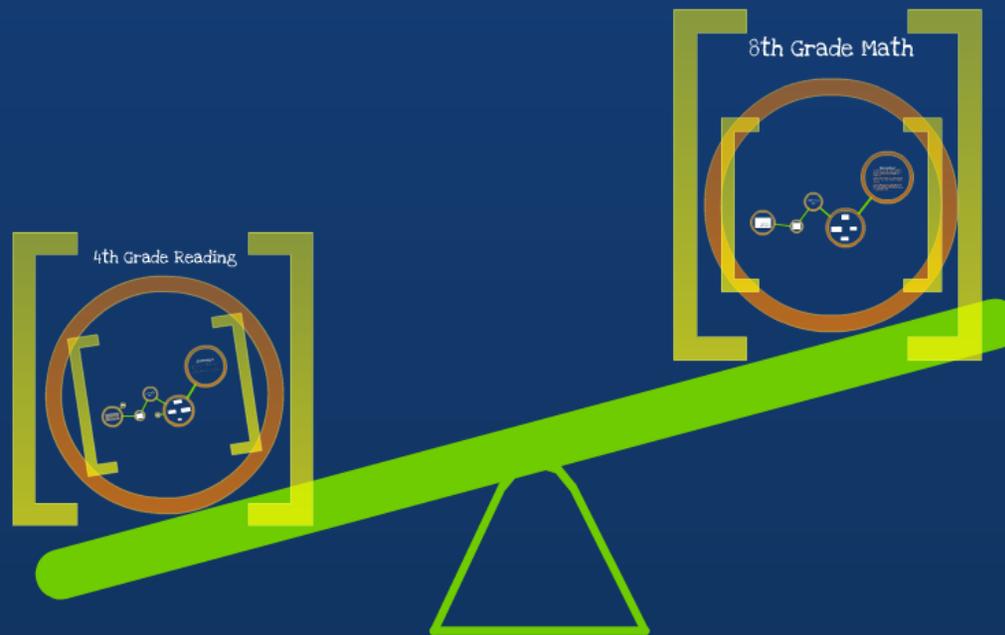


Takeaways

- The percent of 8th graders meeting math standard is significantly lower than the percent of 4th graders meeting reading standard; however, we are making gains toward closing proficiency and opportunity gaps.
- Except for American Indian students - they are the only subgroup that didn't experience a bump in the percent of students meeting 8th grade math standard.
- The low rate of English Language Learners (ELL) meeting standard in 8th grade math comports with several reports in the last 5 years recommending that content teachers receive professional development to support their instruction of ELLs.

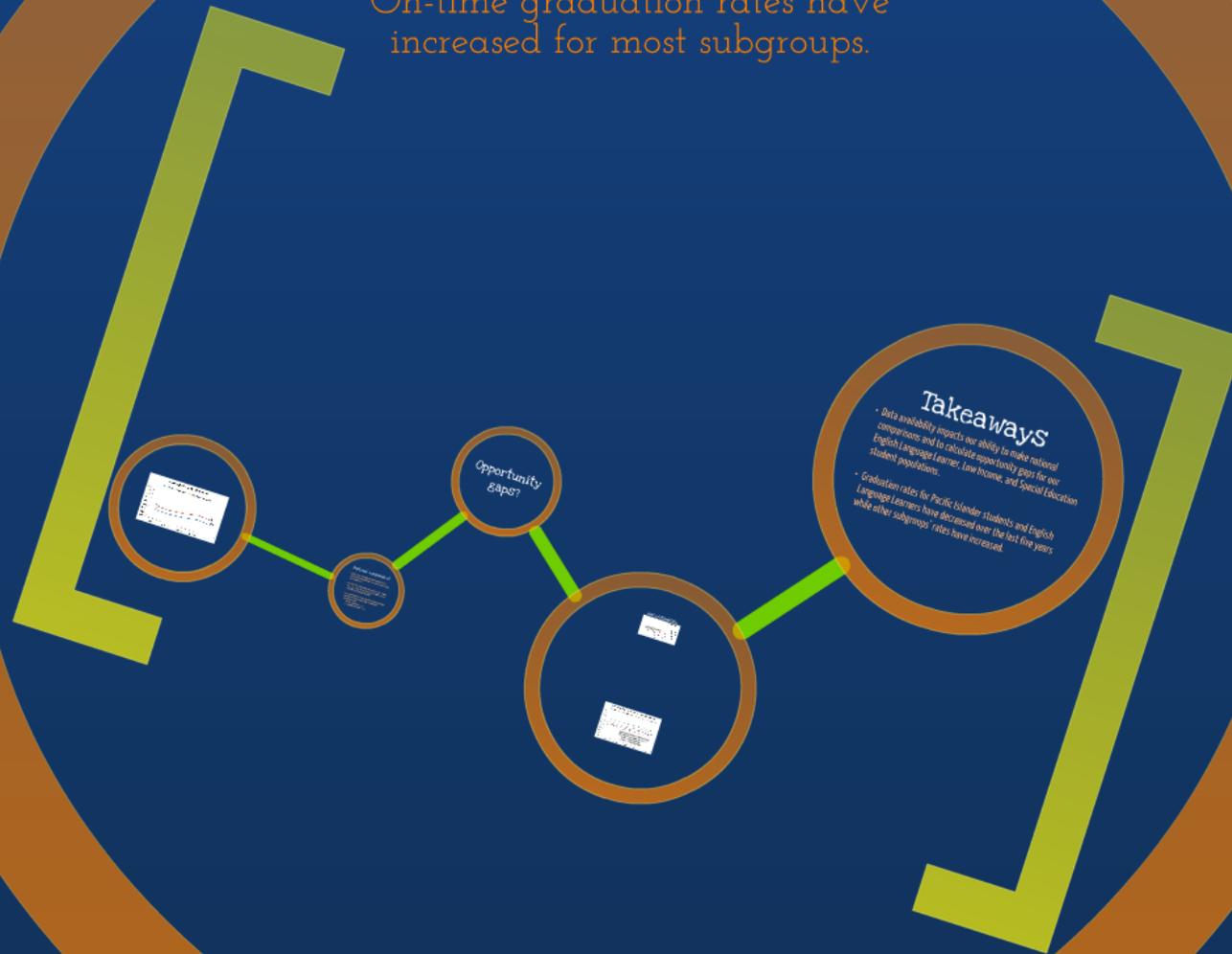
Reading & Math

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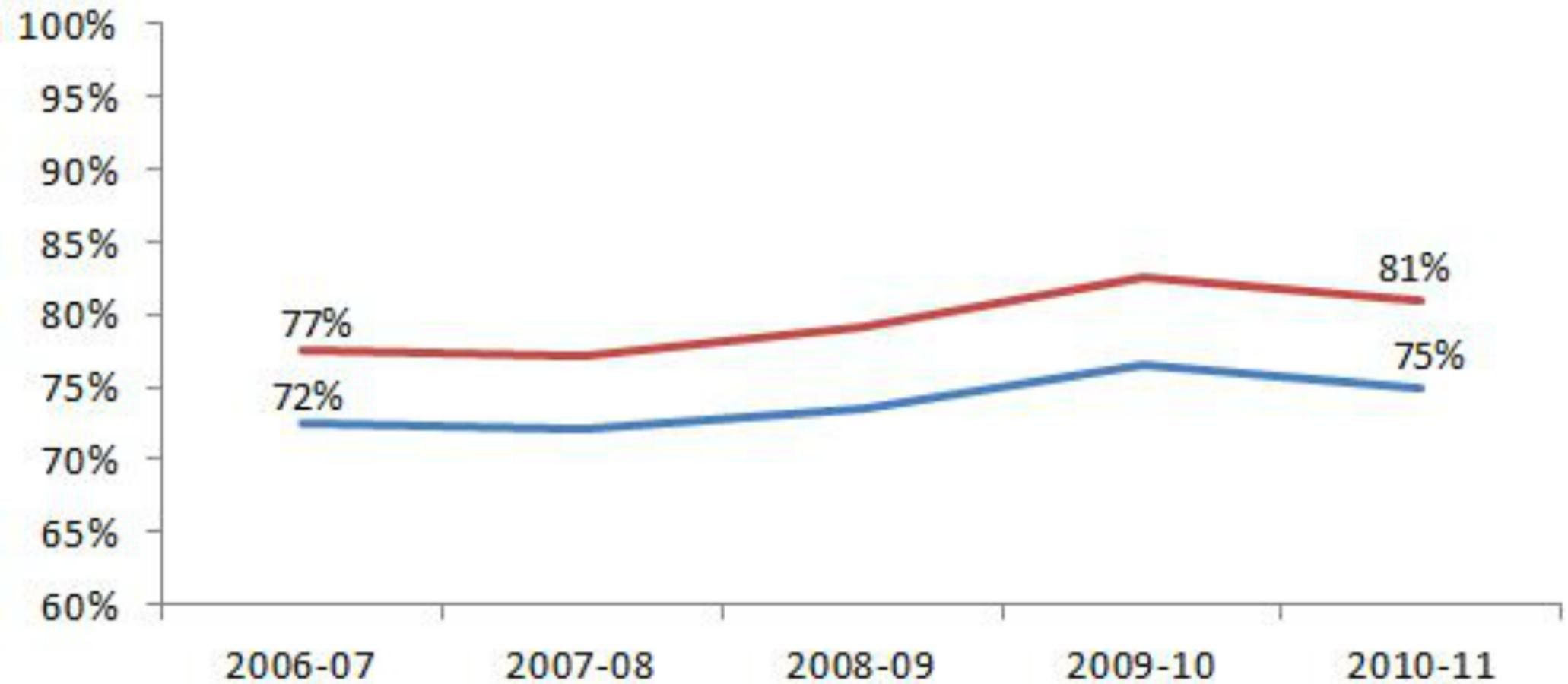
Graduation Rates

On-time graduation rates have increased for most subgroups.



Washington's Graduation Rates

— On-Time Grad Rate — Extended Grad Rate



National comparison?

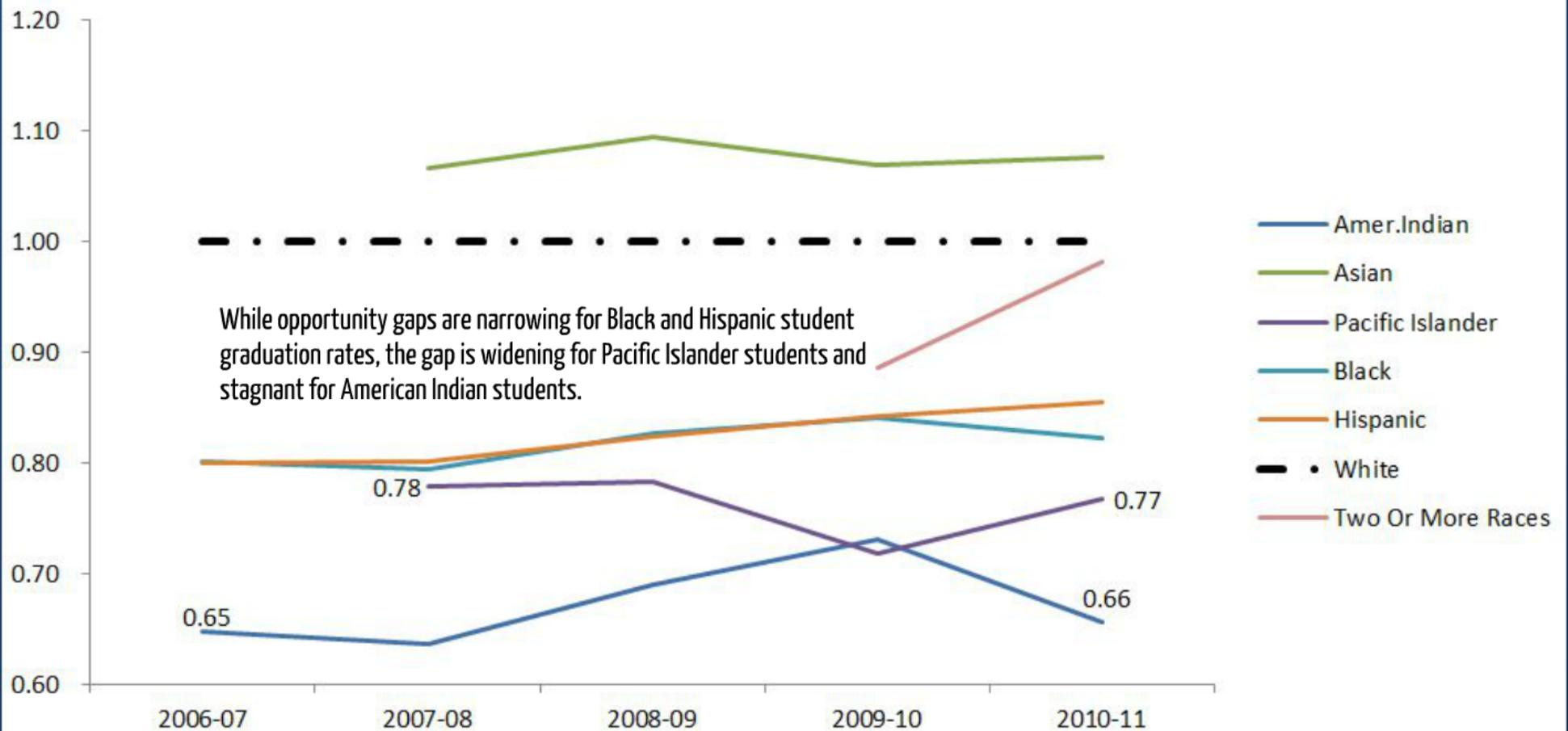
- Because states have applied inconsistent formulas to calculate their graduation rates, it is hard to find good data at the national level.
- We should have better data in the next few years. Starting in 2009-10, states have been required to report the "four-year adjusted cohort graduation rate."
- In 2011, Washington's four-year adjusted cohort graduation rate reflected a slight increase from our traditional calculation method:
 - On-time graduation 75.0%
 - 4-year adjusted cohort: 76.6%



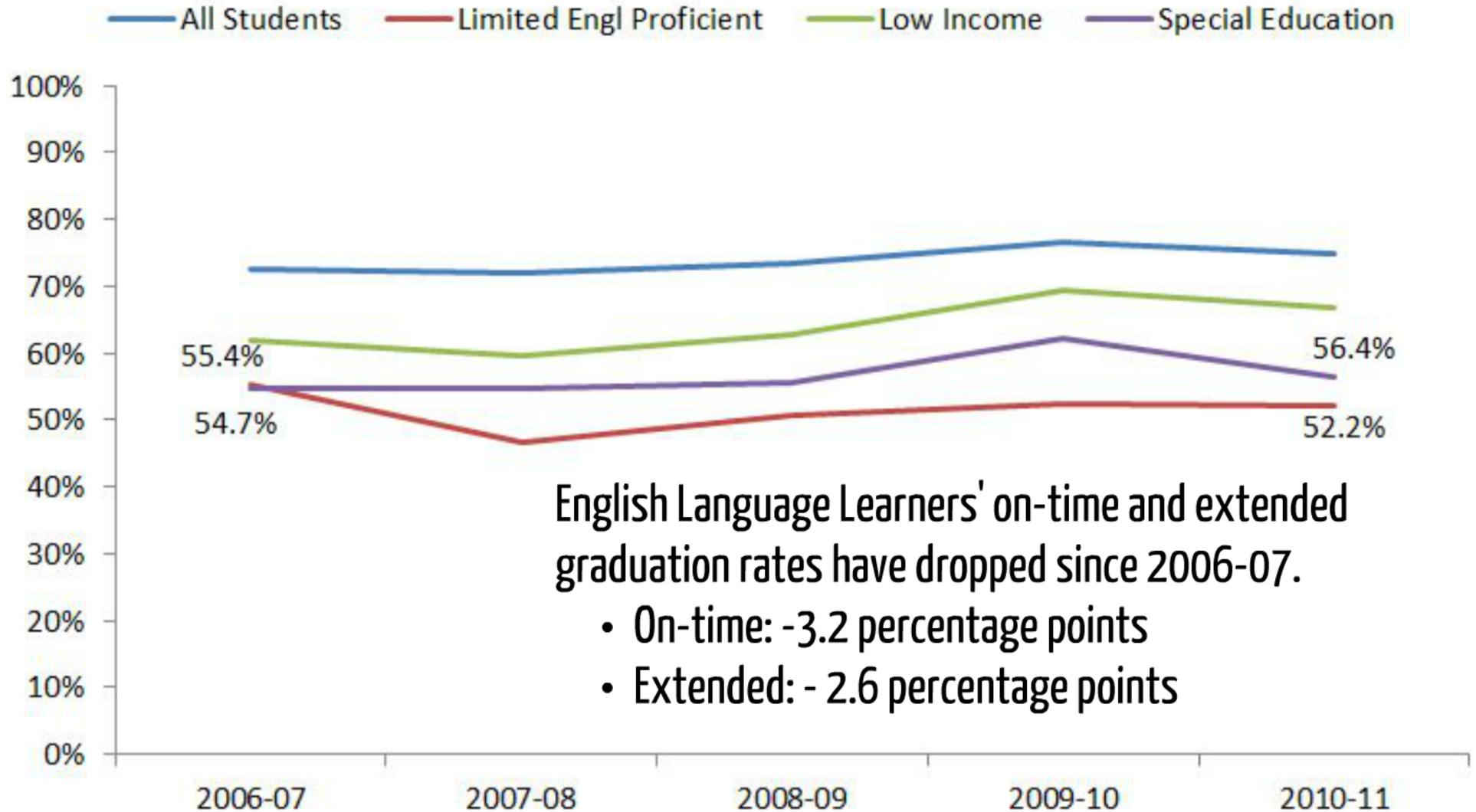
Opportunity
gaps?

Race/Ethnicity

On-Time Graduation Rate - Ratios focus on opportunity gaps



On-Time Grad Rate: ELL, Low-Income, and Special Education



Takeaways

- Data availability impacts our ability to make national comparisons and to calculate opportunity gaps for our English Language Learner, Low Income, and Special Education student populations.
- Graduation rates for Pacific Islander students and English Language Learners have decreased over the last five years while other subgroups' rates have increased.

Graduation Rates

On-time graduation rates have increased for most subgroups.



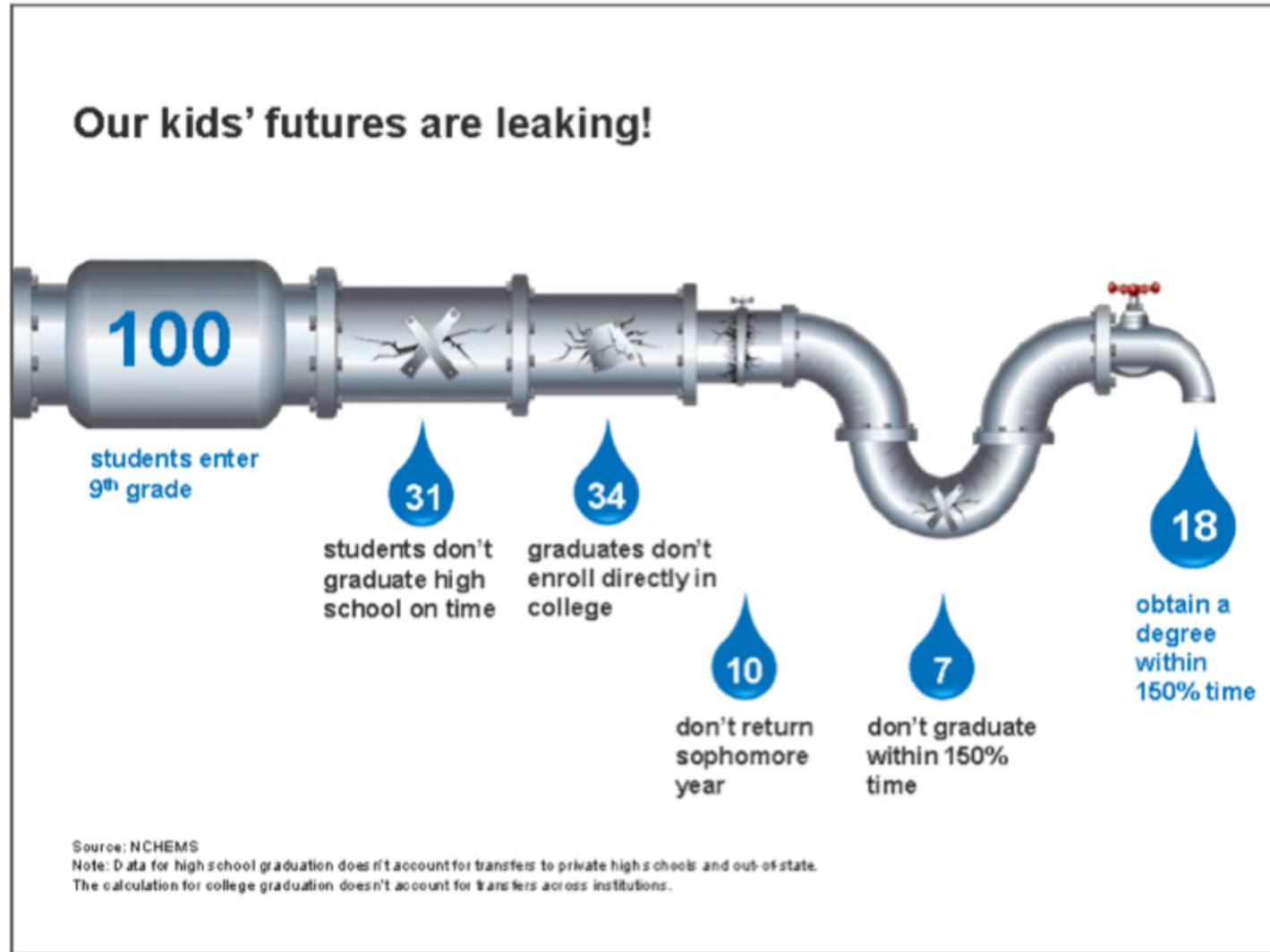
College Enrollment & Remediation



Leaky Pipeline...

Washington's Pipeline

In 2008, **29 states** had higher 9th grade to college transition and completion rates than Washington.



Sources:
Lazowska, Ed. "STEM Education in Washington, The Facts of the Matter."
NCHEMS

But is it really that leaky?

According to the June 2012 ERDC Research Brief, "Postsecondary Enrollment Patterns," almost 51% of our 2004-05 high school graduates received a postsecondary award by 2010, and almost 23% were still enrolled in postsecondary education.

Skills Mismatch Index

Skill Mismatch Index

“The difference between the skill demand and supply in a state.”

“Washington State experienced a double digit percentage increase in their skill mismatch index in 2010.”

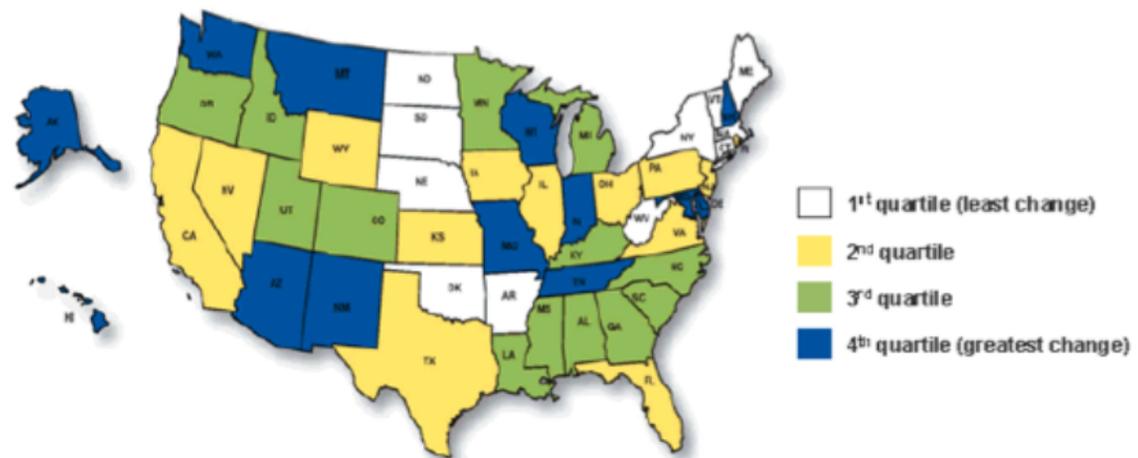
Sources:

Estavao, Marcello and Evidiki Tsounta, “Has the Great Recession Raised U.S. Structural Unemployment?” International Monetary Fund, 2011/Haver Analytics, U.S. Bureau of Labor Statistics, U.S. Census Bureau, author’s calculations.

Lazowska, Ed. “STEM Education in Washington, The Facts of the Matter.”

The mismatch between the skills required for available jobs and the skills people have is growing.

% Change in Skills Mismatch Index by State (2007-2010)

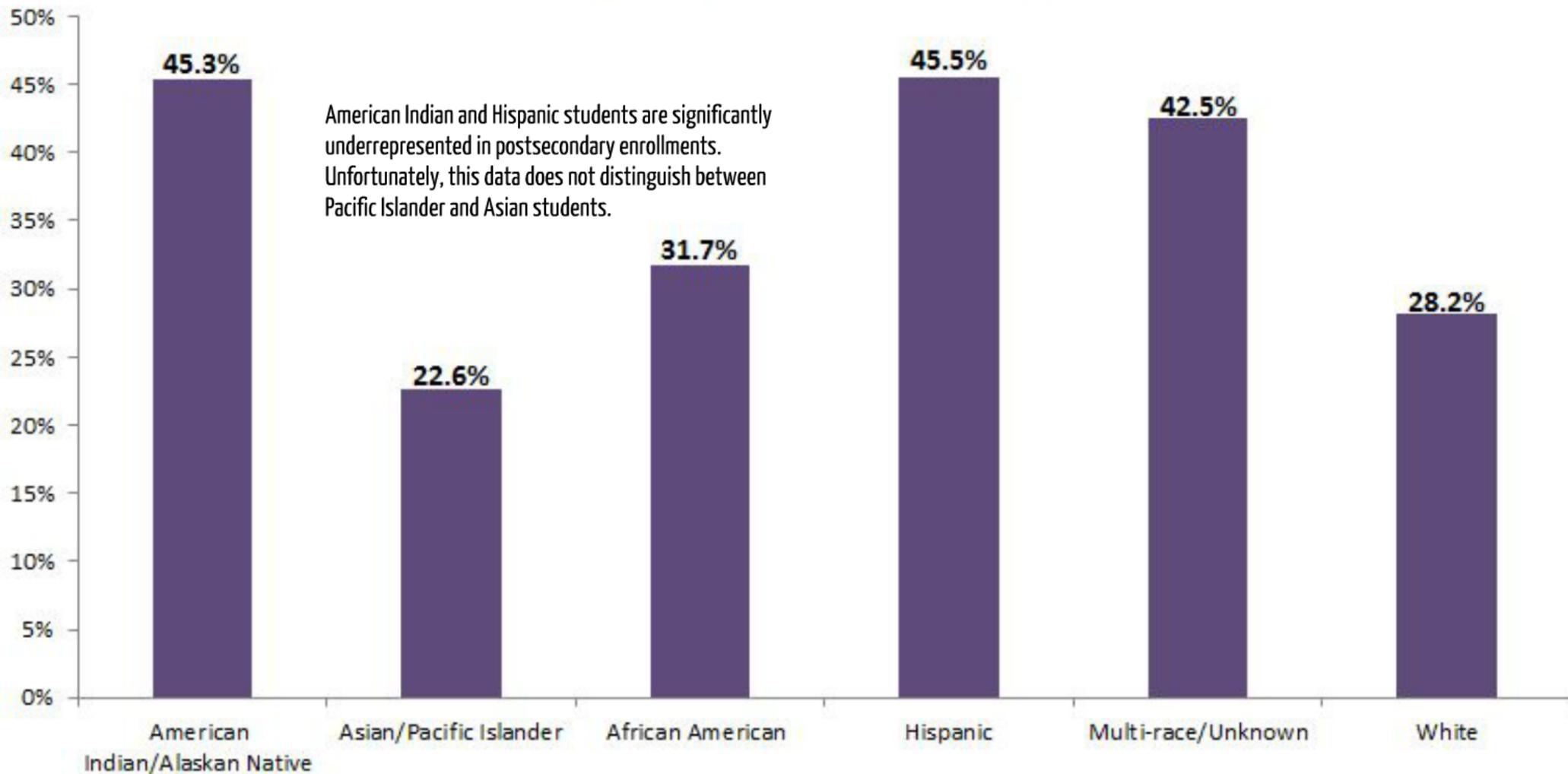


Source: Estavao, Marcello and Evidiki Tsounta, “Has the Great Recession Raised U.S. Structural Unemployment?” International Monetary Fund, 2011/Haver Analytics, U.S. Bureau of Labor Statistics, U.S. Census Bureau, author’s calculations

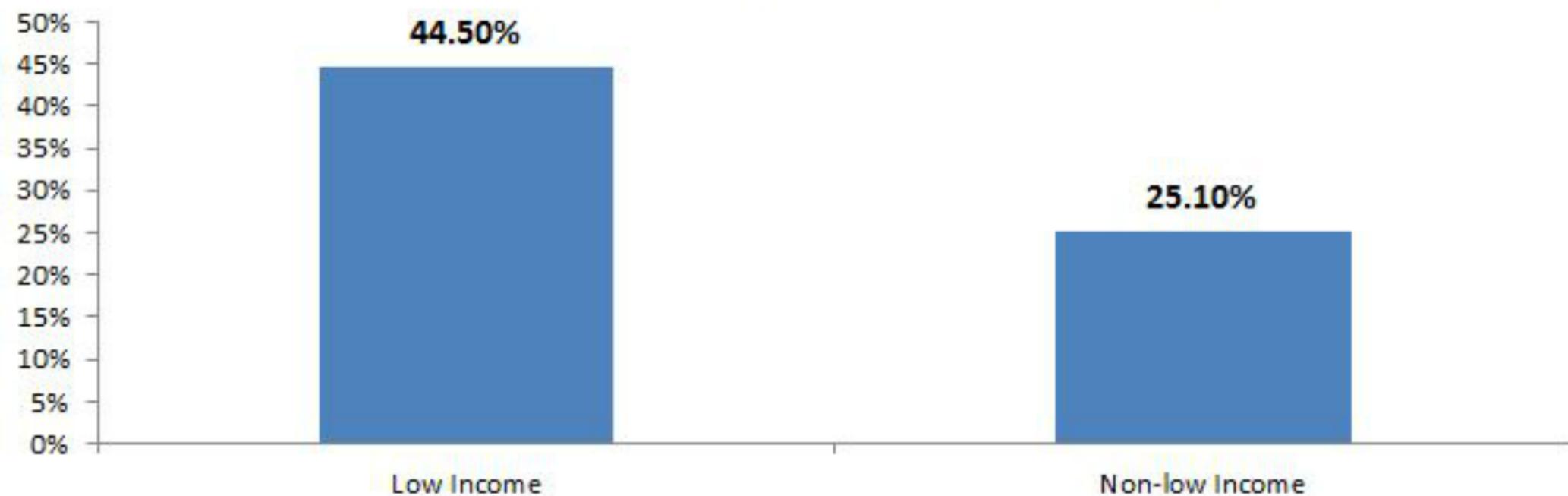
State level post-secondary data

Postsecondary Enrollment

29.6% No Postsecondary Enrollment of 2004-05 High School Graduates - Disaggregated by Race/Ethnicity

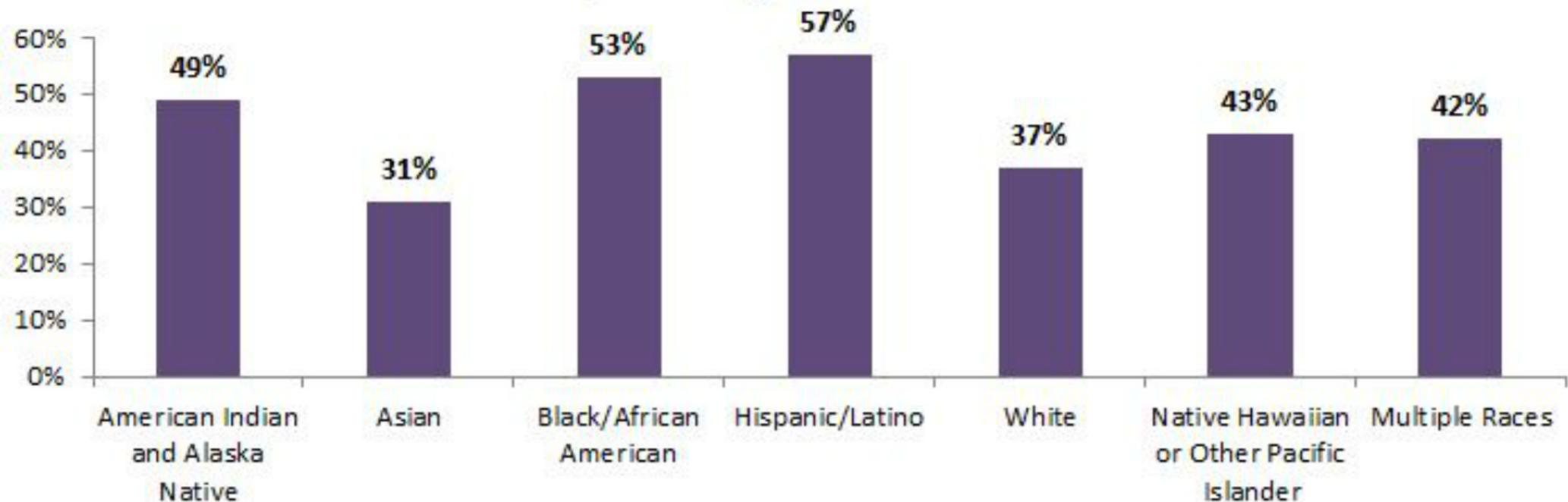


Almost half of low income 2004-05 high school graduates did not enroll in a postsecondary institution within five years.

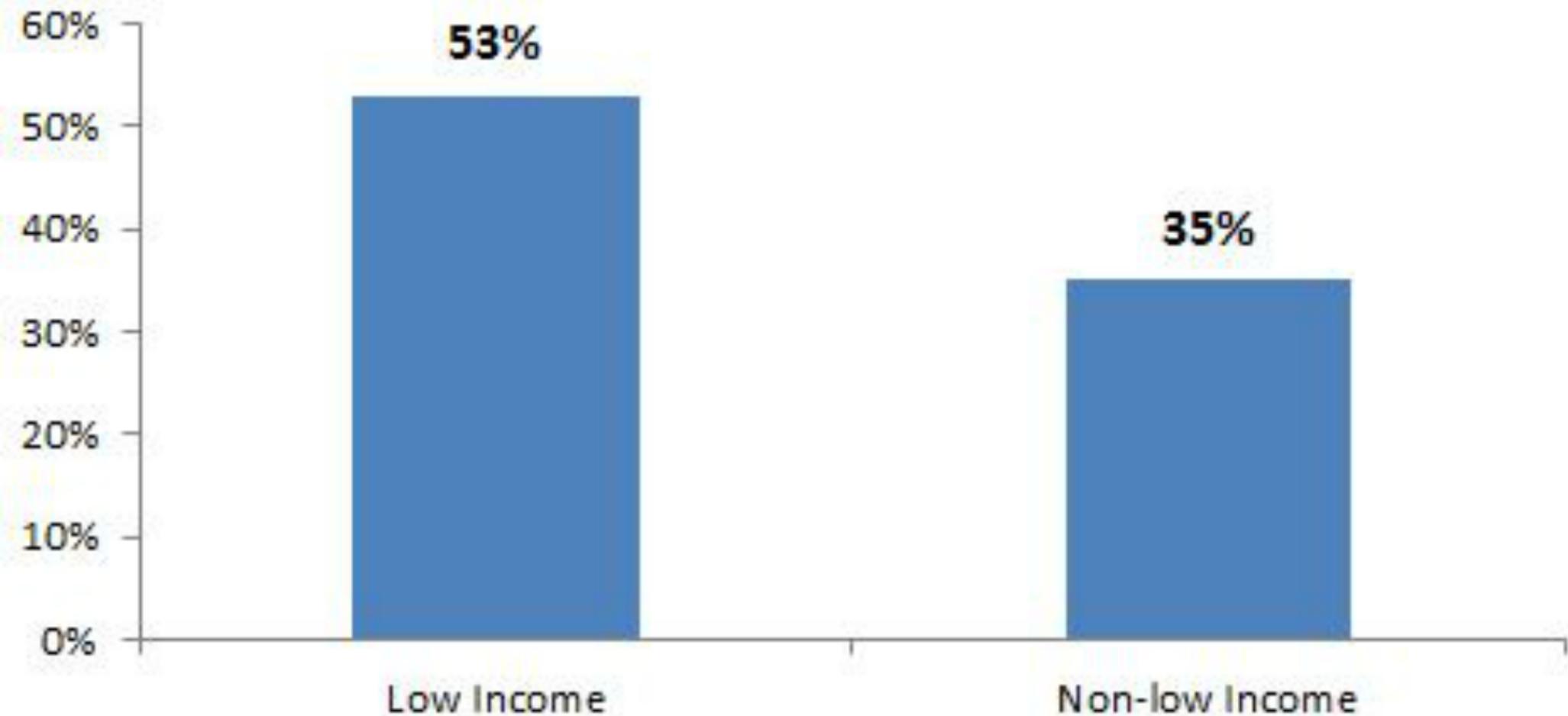


Pre-college (Remedial) Coursework

Over half of our Hispanic and Black 2008-09 High School Graduates enrolled in pre-college coursework in 2009-10.



53% of low income 2008-09 high school graduates enrolled in pre-college coursework.



Takeaways

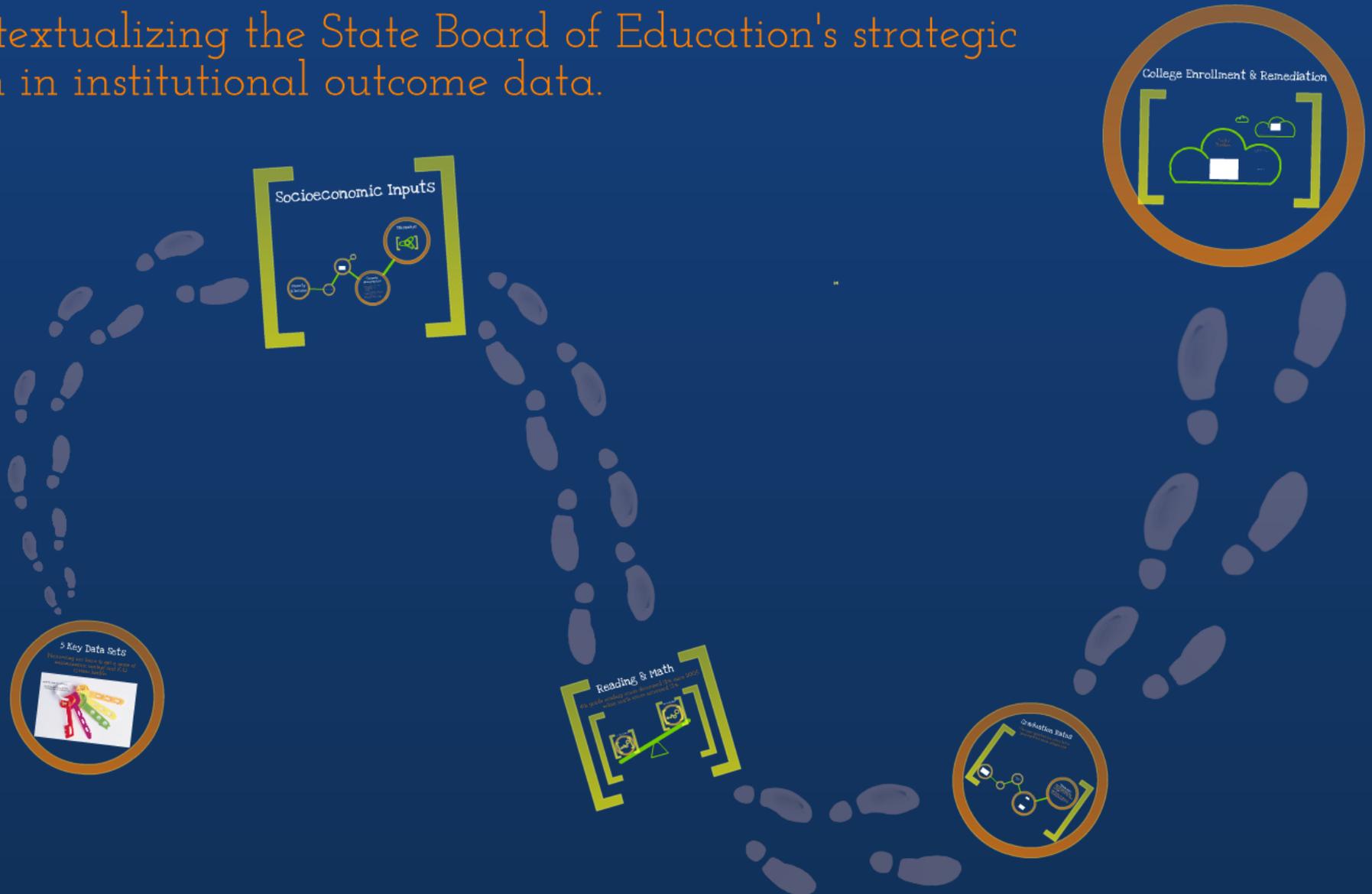
- The students who "leak" out of our pipeline are disproportionately students of color and low-income students.
- Our under-served subgroup student populations - especially Hispanic, Black, and low-income students - are not prepared for postsecondary coursework when they leave our K-12 system.
- The lack of consistently disaggregated and longitudinal post-secondary feedback data limits the ability of K-12 policymakers and practitioners to make informed decisions about secondary education.

College Enrollment & Remediation



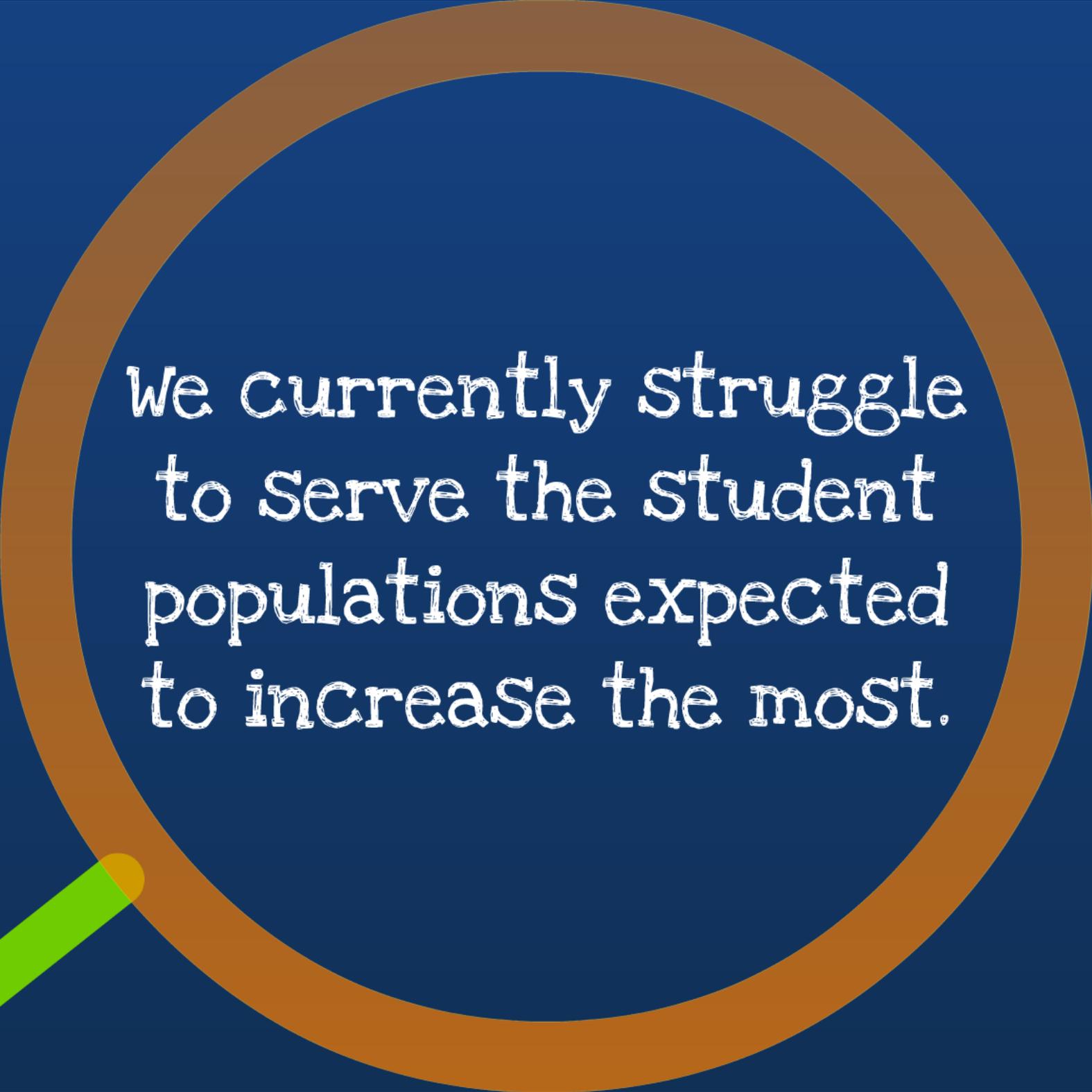
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to serve the student
populations expect
to increase the most

Are we
ready?

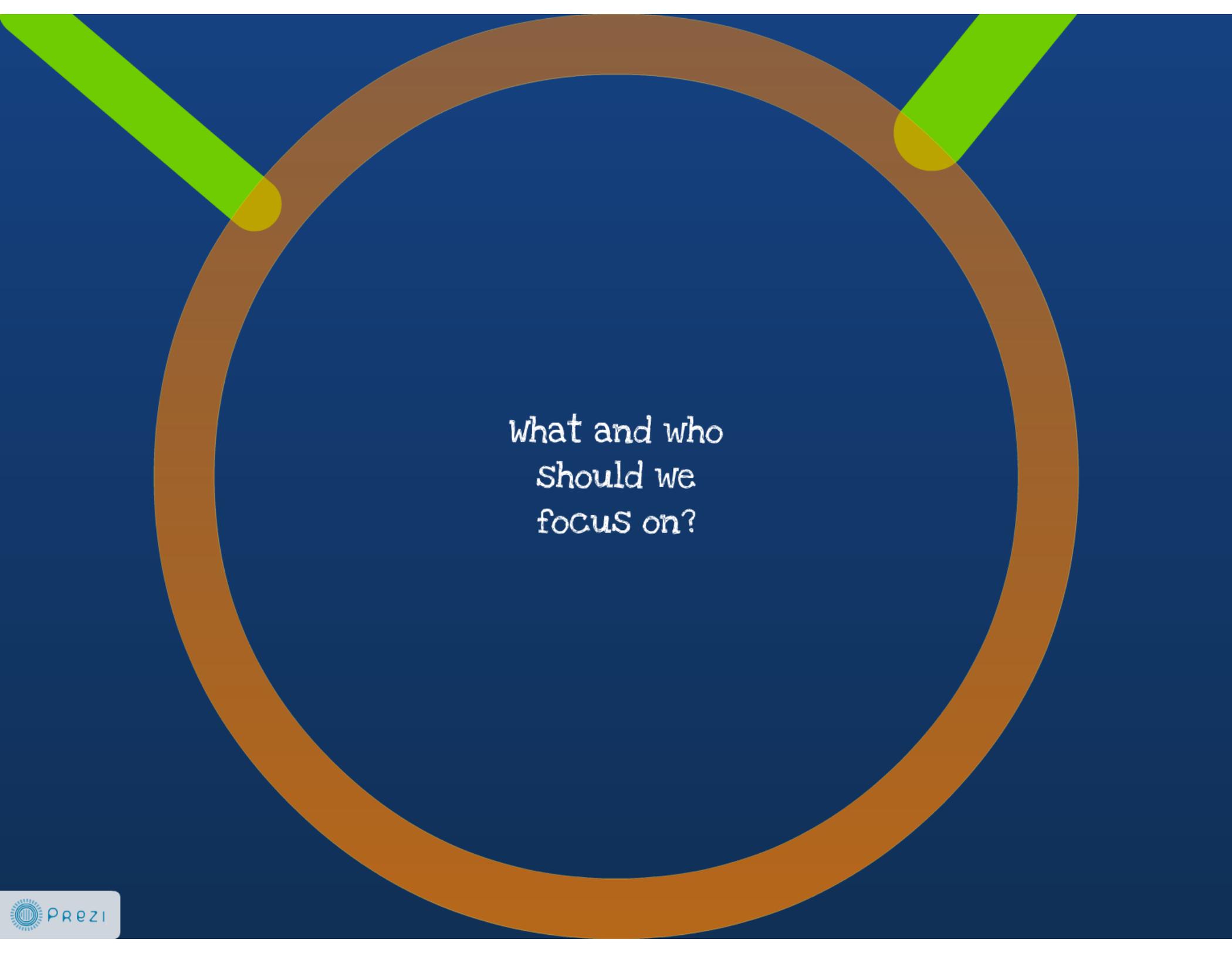


We currently struggle
to serve the student
populations expected
to increase the most.

If reading scores continue to drop, students - especially our under-served subgroups - won't have the literacy skills to access math and science content in middle and high school.



But improvement in 8th
grade math scores shows
that the right focus can
produce positive results
for our kids.



what and who
should we
focus on?

How do we improve and prepare?

- Do we need more data?
 - If so, what do we need?
- Strongly emphasized themes in the Board's work:
 - Closing opportunity gaps
 - Strengthening transitions
- Within the Board's scope of work:
 - Achievement Index & Accountability Framework
 - Graduation Requirements
 - Basic Education Act compliance