

# RAISING ACHIEVEMENT AND CLOSING GAPS BETWEEN GROUPS:

Lessons from Schools and  
Districts on the Performance  
Frontier



The Education Trust

Mayor's Education Summit  
Anchorage, AK

November, 2011

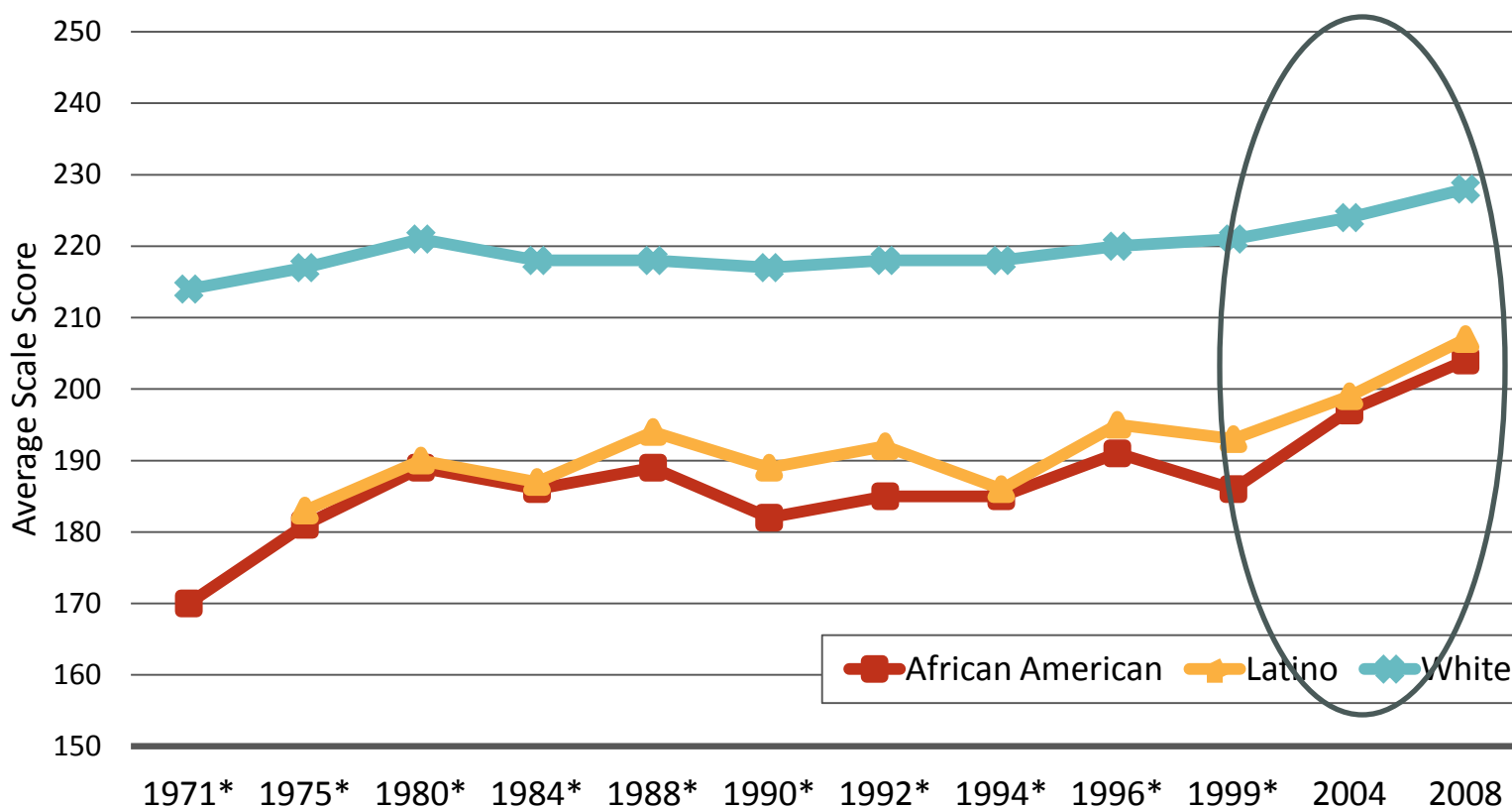


# First, some good news.

After more than a decade of fairly flat achievement and stagnant or growing gaps, we appear to be turning the corner.

# 4<sup>th</sup> Grade Reading: Record Performance with Gap Narrowing

## 9 Year Olds – NAEP Reading

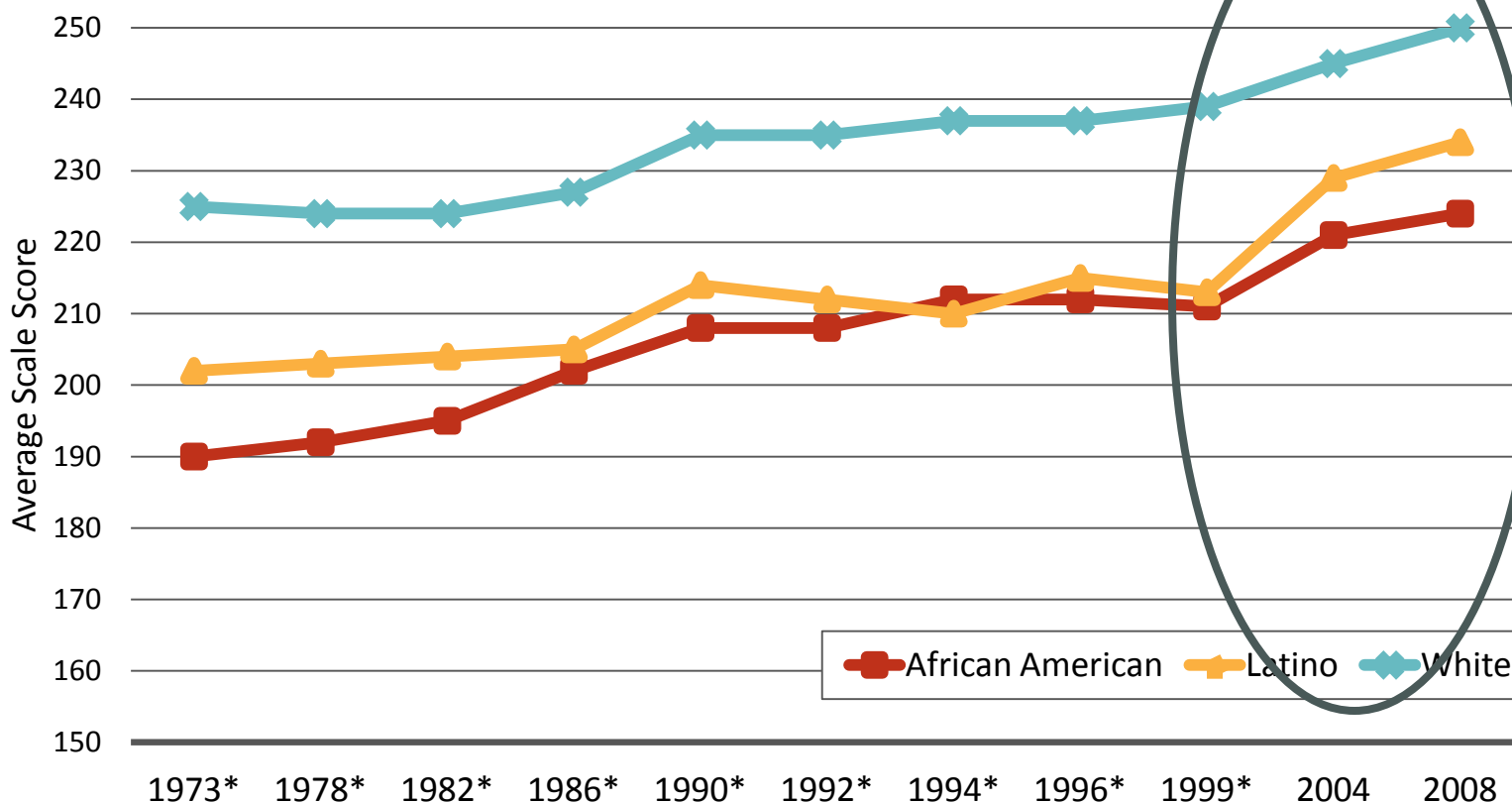


\*Denotes previous assessment format

Source: NAEP 2008 Trends in Academic Progress, NCES

# 4<sup>th</sup> Grade Math: Record Performance with Gap Narrowing

## 9 Year Olds – NAEP Math

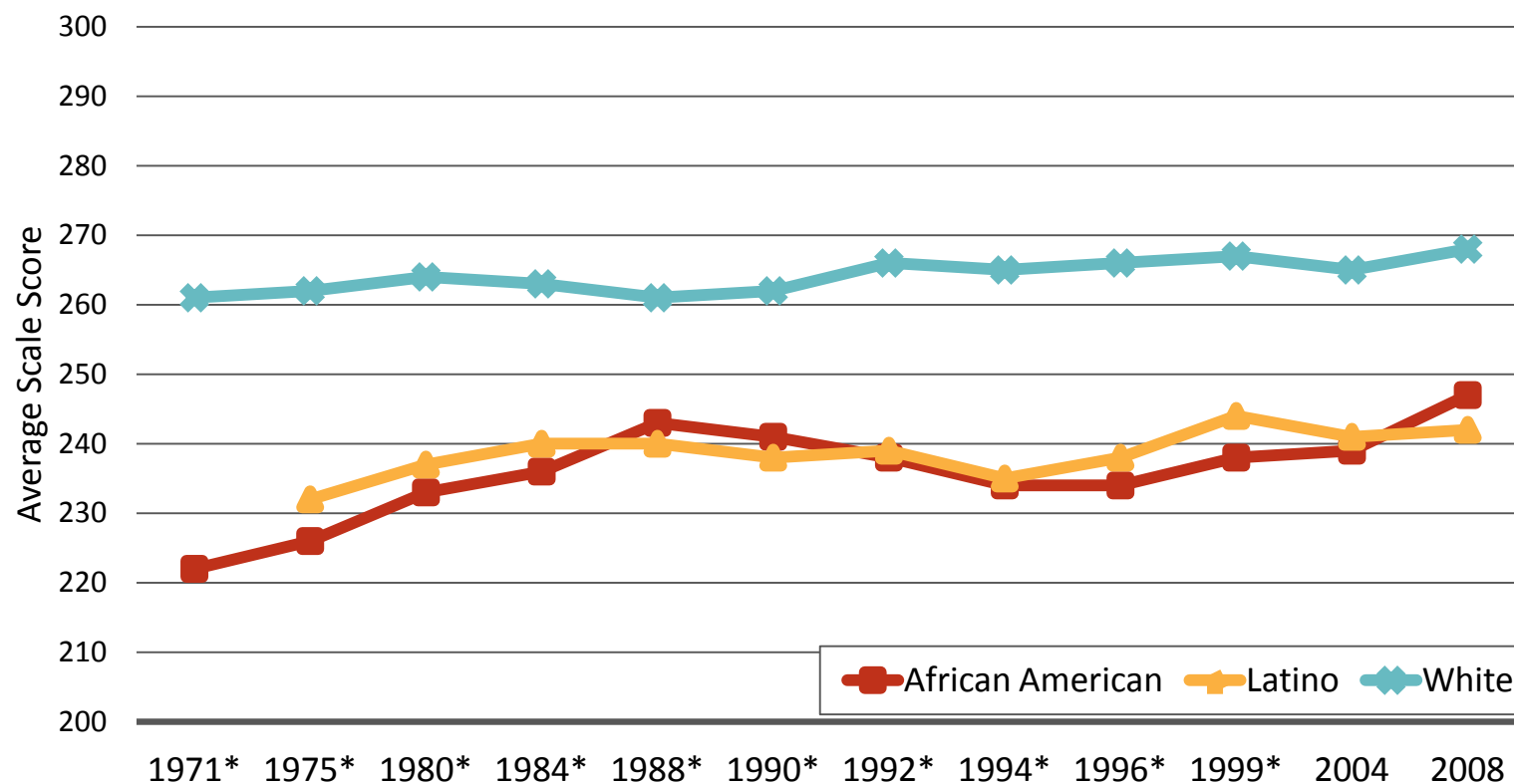


\*Denotes previous assessment format

Source: NAEP 2008 Trends in Academic Progress, NCES

# 8<sup>th</sup> Grade Reading: Recent Gap Narrowing for Blacks, Less for Latinos

## 13 Year Olds – NAEP Reading

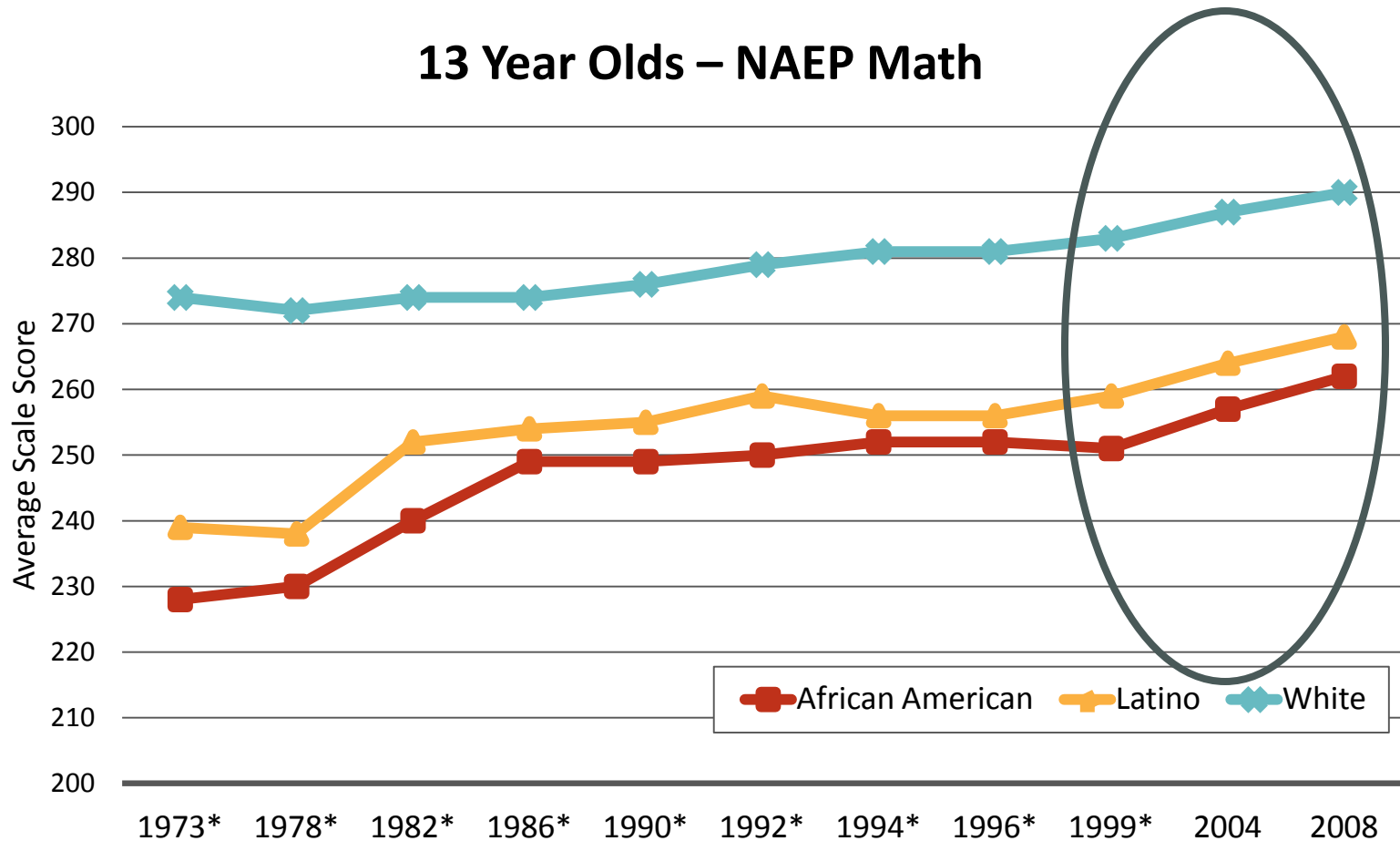


\*Denotes previous assessment format

Source: NAEP 2008 Trends in Academic Progress, NCES

# 8<sup>th</sup> Grade Math: Progress for All Groups, Some Gap Narrowing

## 13 Year Olds – NAEP Math



\*Denotes previous assessment format

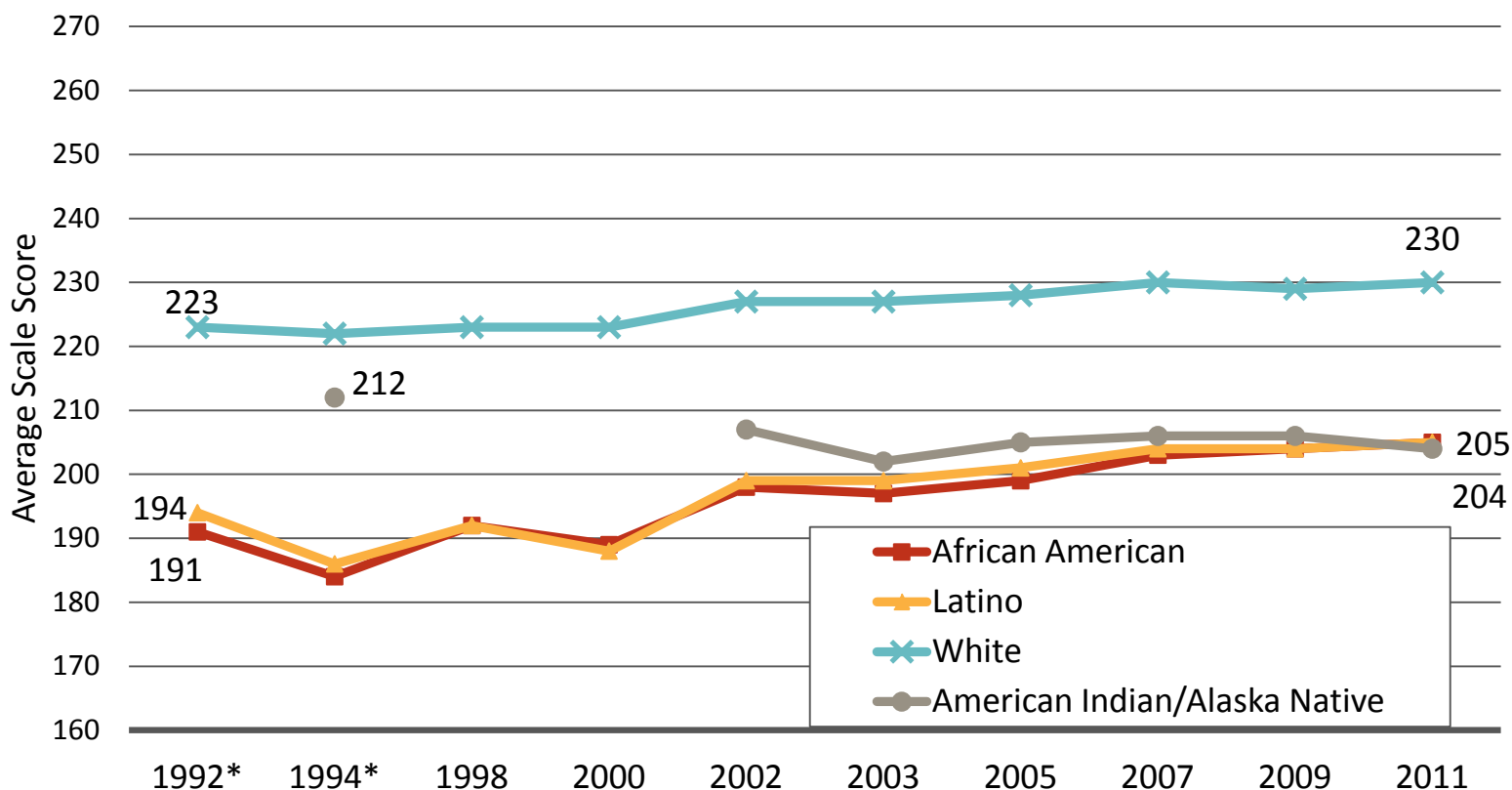
Source: NAEP 2008 Trends in Academic Progress, NCES

Same pattern on Main NAEP exams.



# Some gap-closing over last decade

## National Public – Grade 4 NAEP Reading

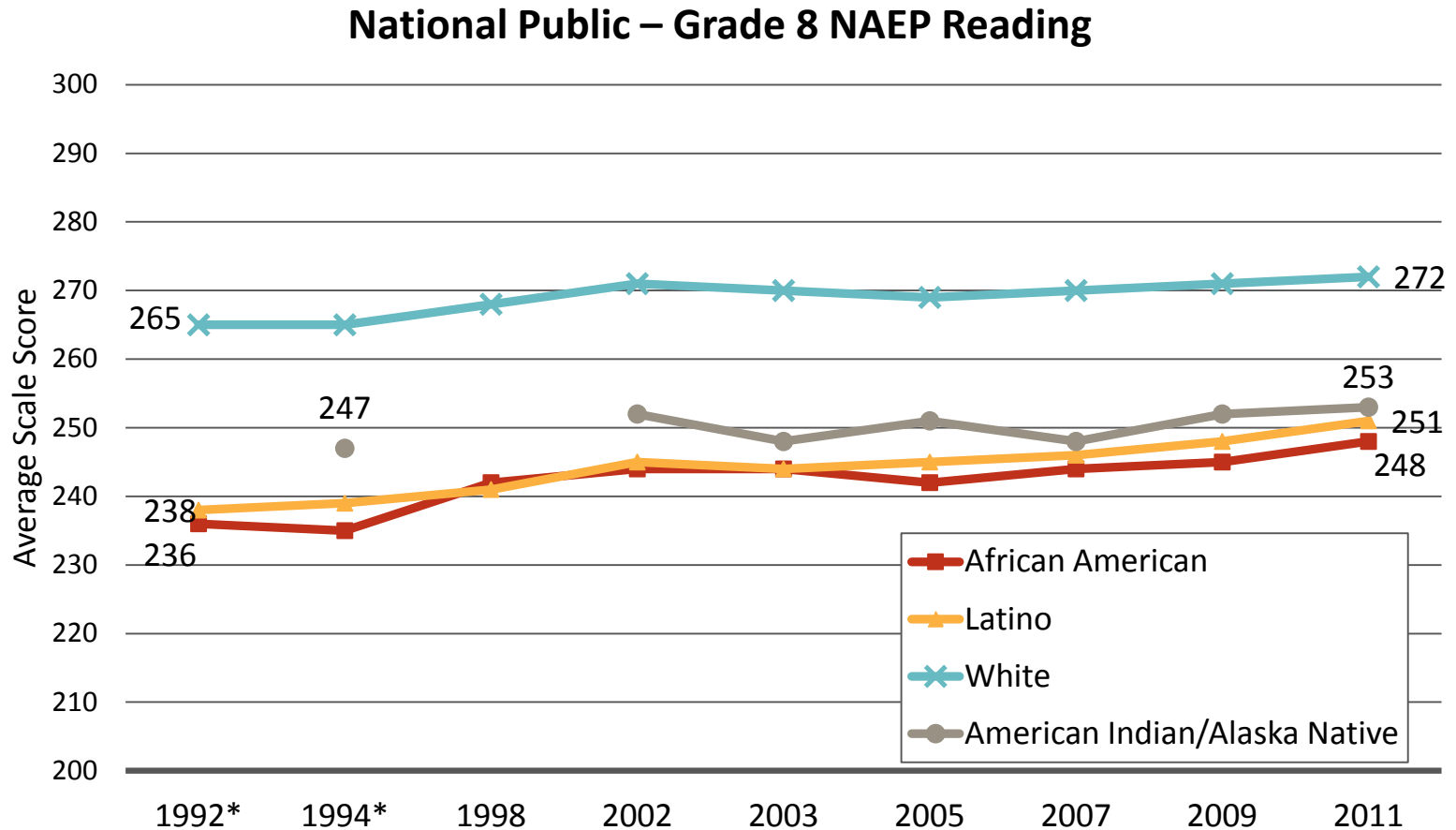


\*Accommodations not permitted

Source: NAEP Data Explorer, NCES (Proficient Scale Score = 238)



# Some gap closing over the last decade

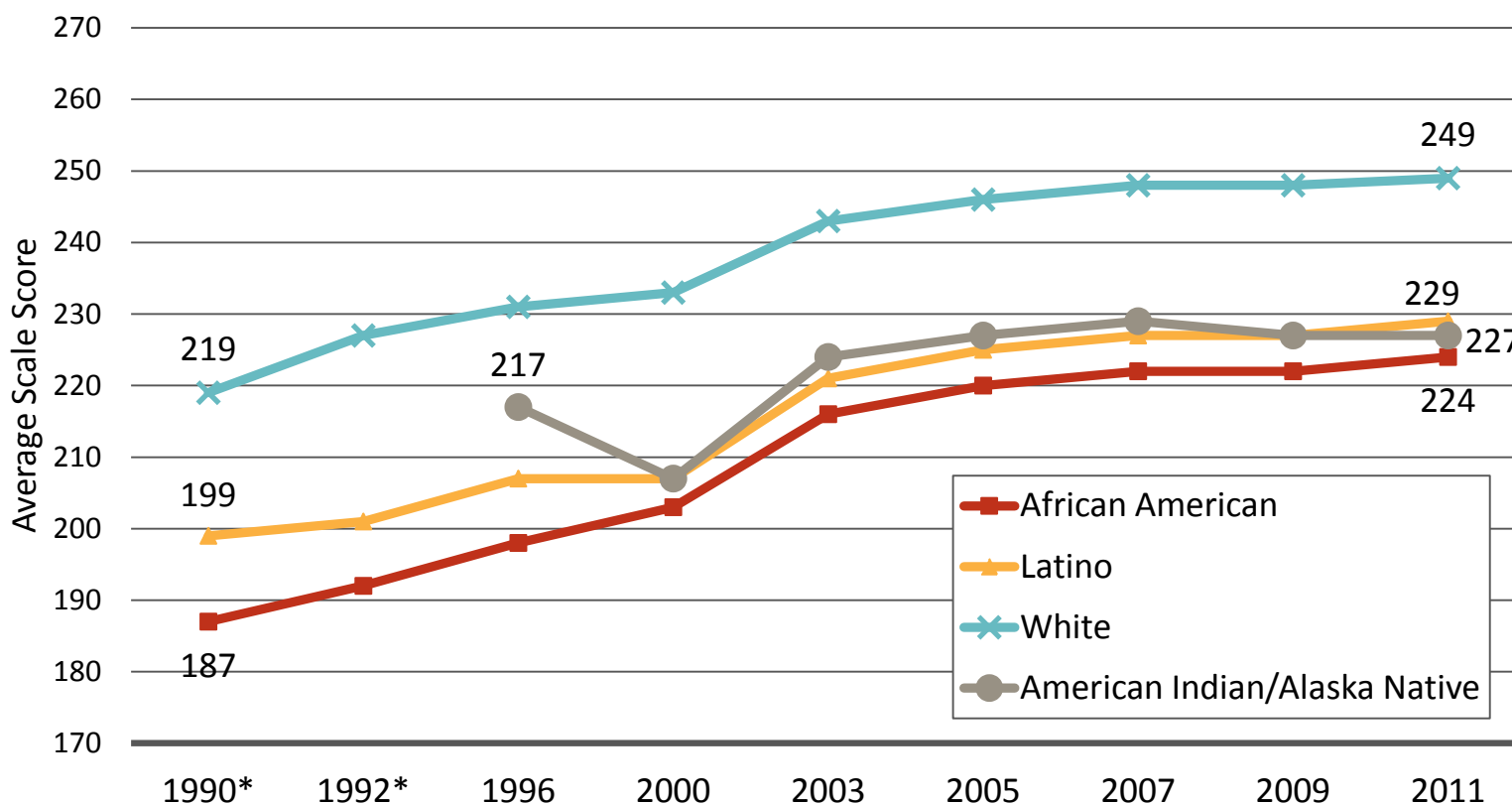


\*Accommodations not permitted

Source: NAEP Data Explorer, NCES (Proficient Scale Score = 281)

All groups have improved since 1990, but gaps between groups remain wide

### National Public – Grade 4 NAEP Math

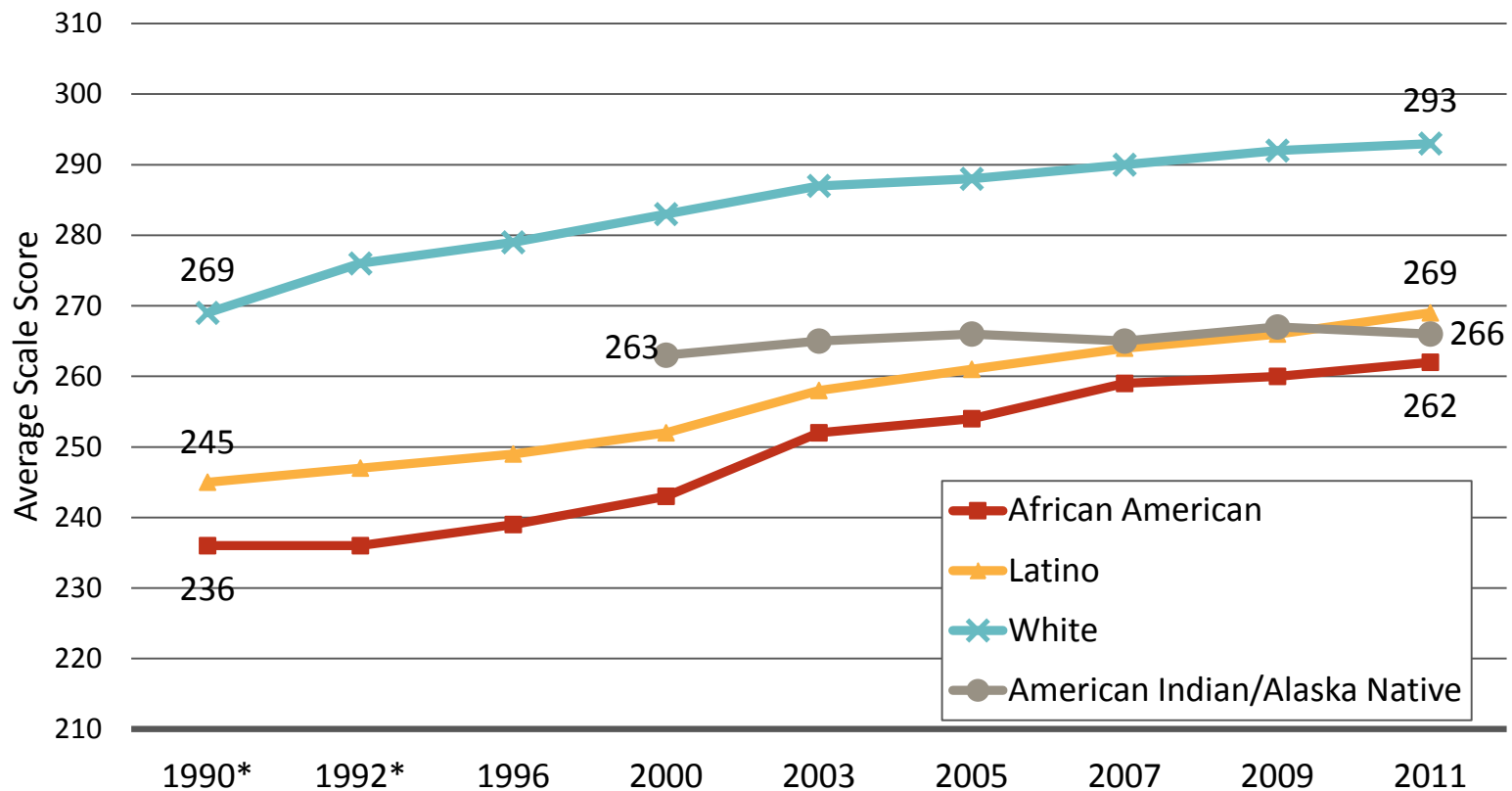


\*Accommodations not permitted

Source: NAEP Data Explorer, NCES (Proficient Scale Score = 249)

Over the last decade, all groups have steadily improved and gaps have narrowed

### National Public – Grade 8 NAEP Math



\*Accommodations not permitted  
Source: NAEP Data Explorer, NCES (Proficient Scale Score = 299)



Bottom Line:

When we really focus on  
something, we make  
progress!

Clearly, much more remains to be done  
in elementary and middle school

Too many youngsters still enter high  
school way behind.

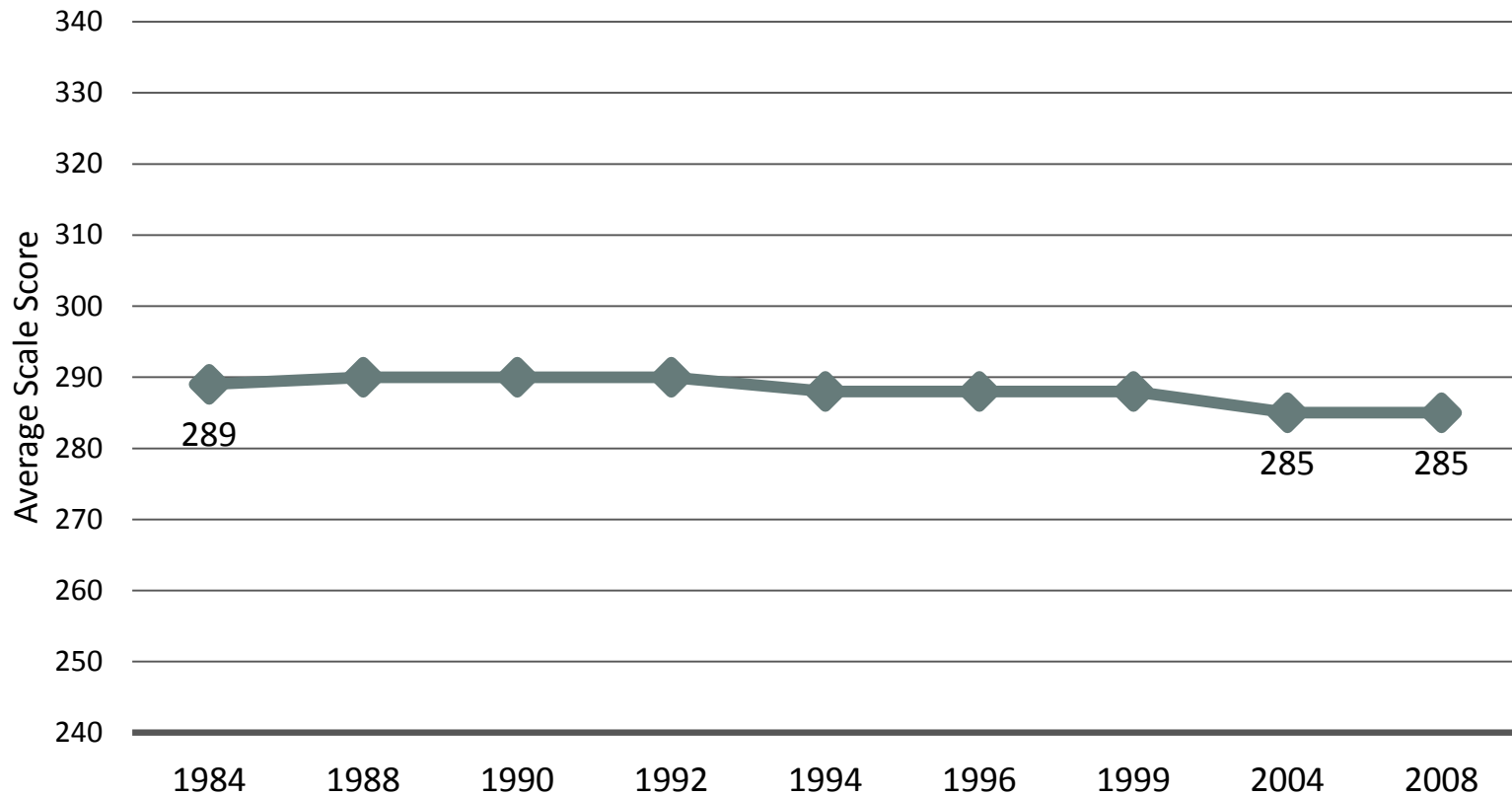
But at least we have some traction on elementary and middle school problems.



The same is NOT true  
of our high schools.

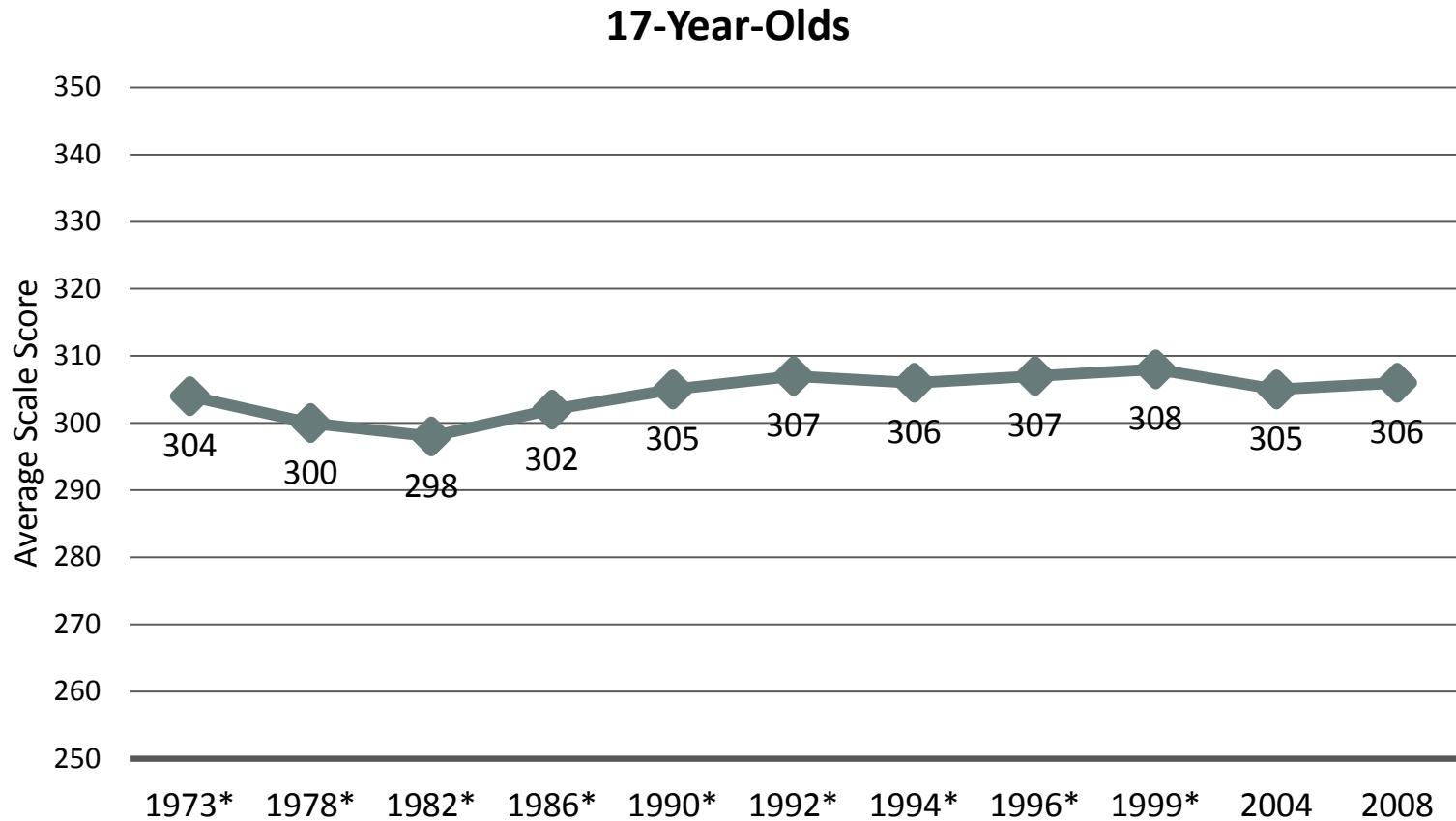
# Achievement Flat in Reading

## 17 Year Olds Overall - NAEP



Source: NAEP Long-Term Trends, NCES (2004)

# Math achievement flat over time



\* Denotes previous assessment format

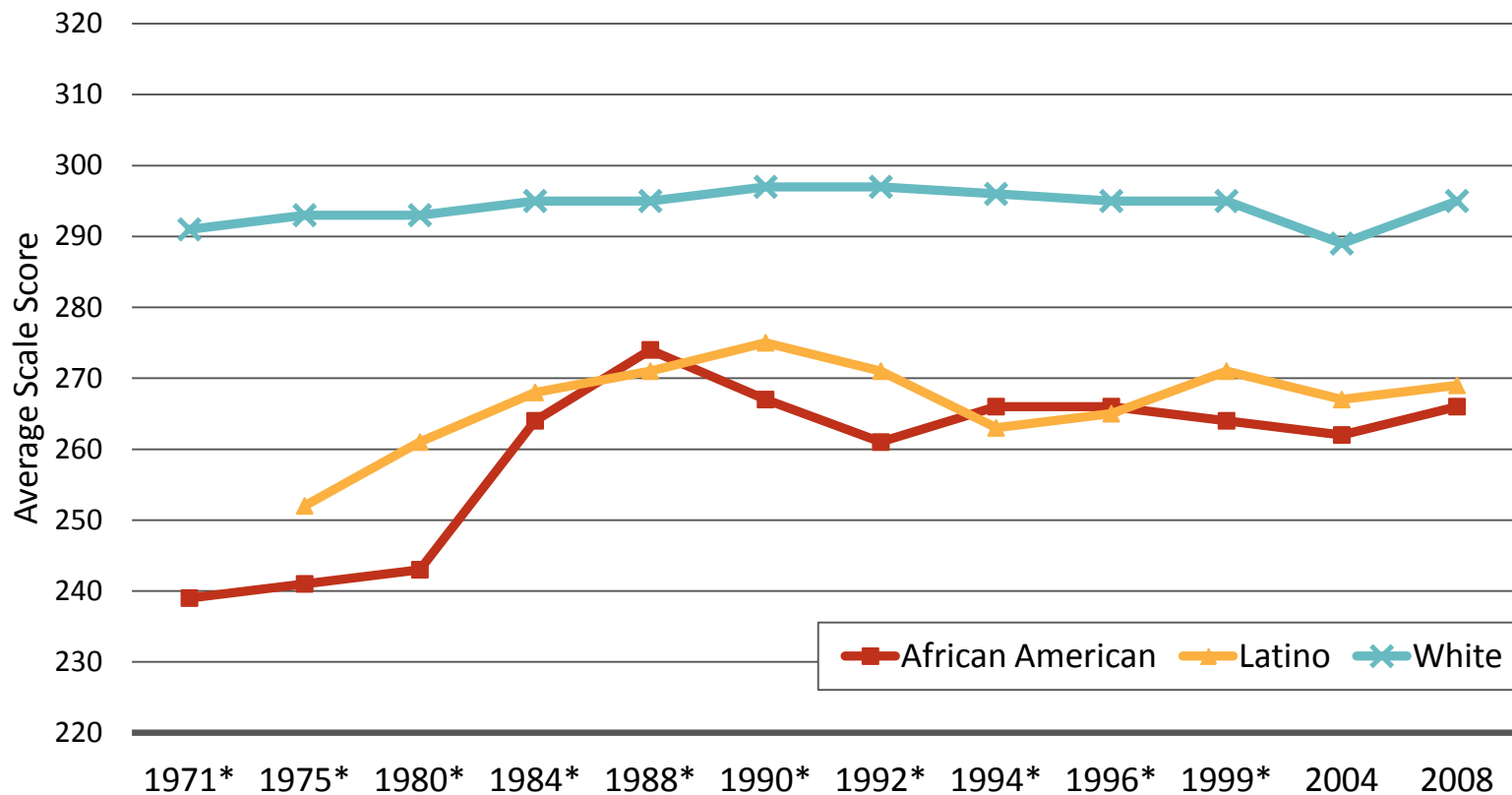
Source: National Center for Education Statistics, NAEP 2008 Trends in Academic Progress



Gaps between groups are mostly  
**wider** today than in late eighties,  
early nineties

# 12<sup>th</sup> Grade Reading: No Progress, Gaps Wider than 1988

## 17 Year Olds – NAEP Reading

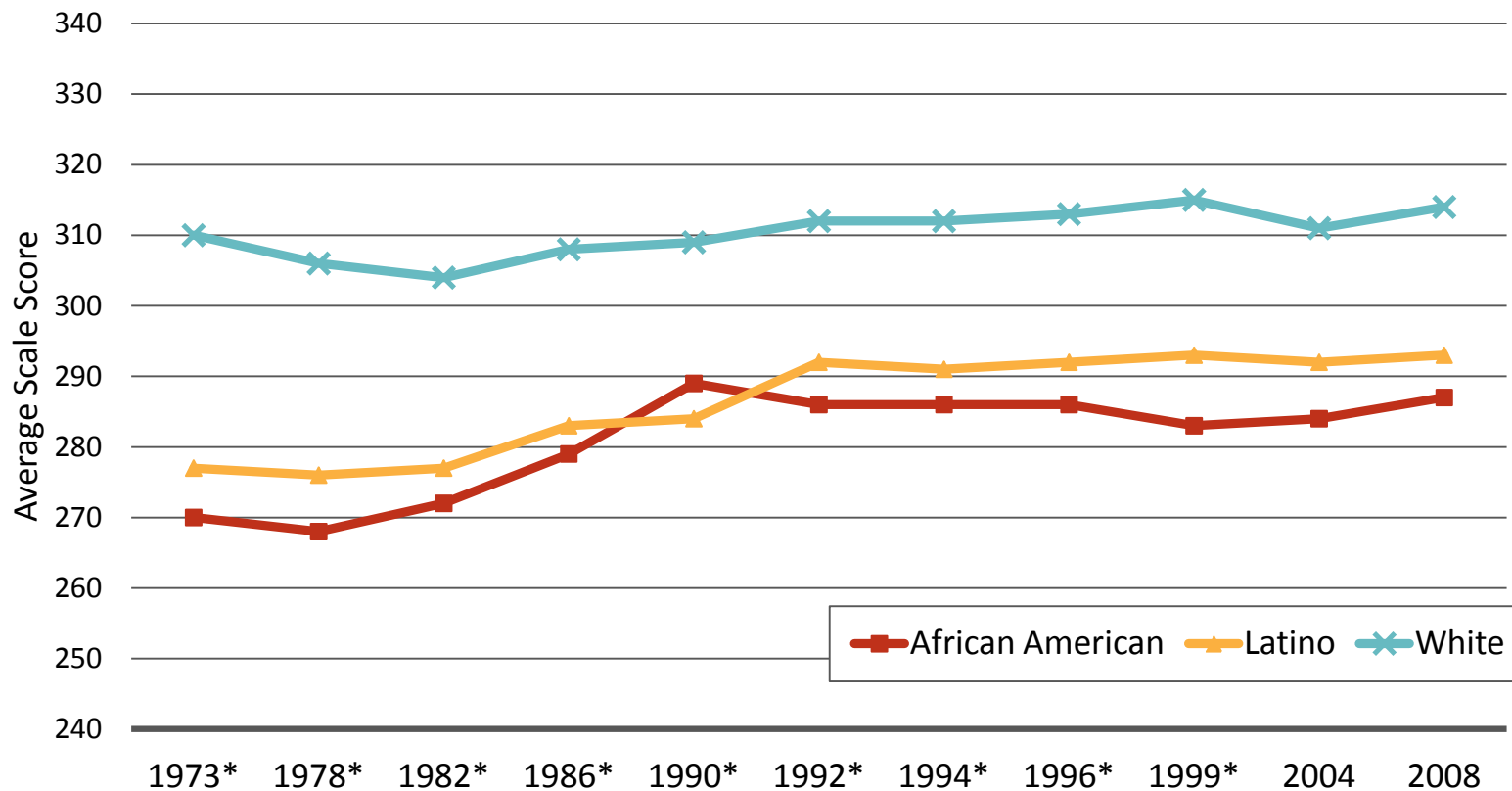


\*Denotes previous assessment format

Source: NAEP 2008 Trends in Academic Progress, NCES

# 12 Grade Math: Results Mostly Flat Gaps Same or Widening

## 17 Year Olds – NAEP Math



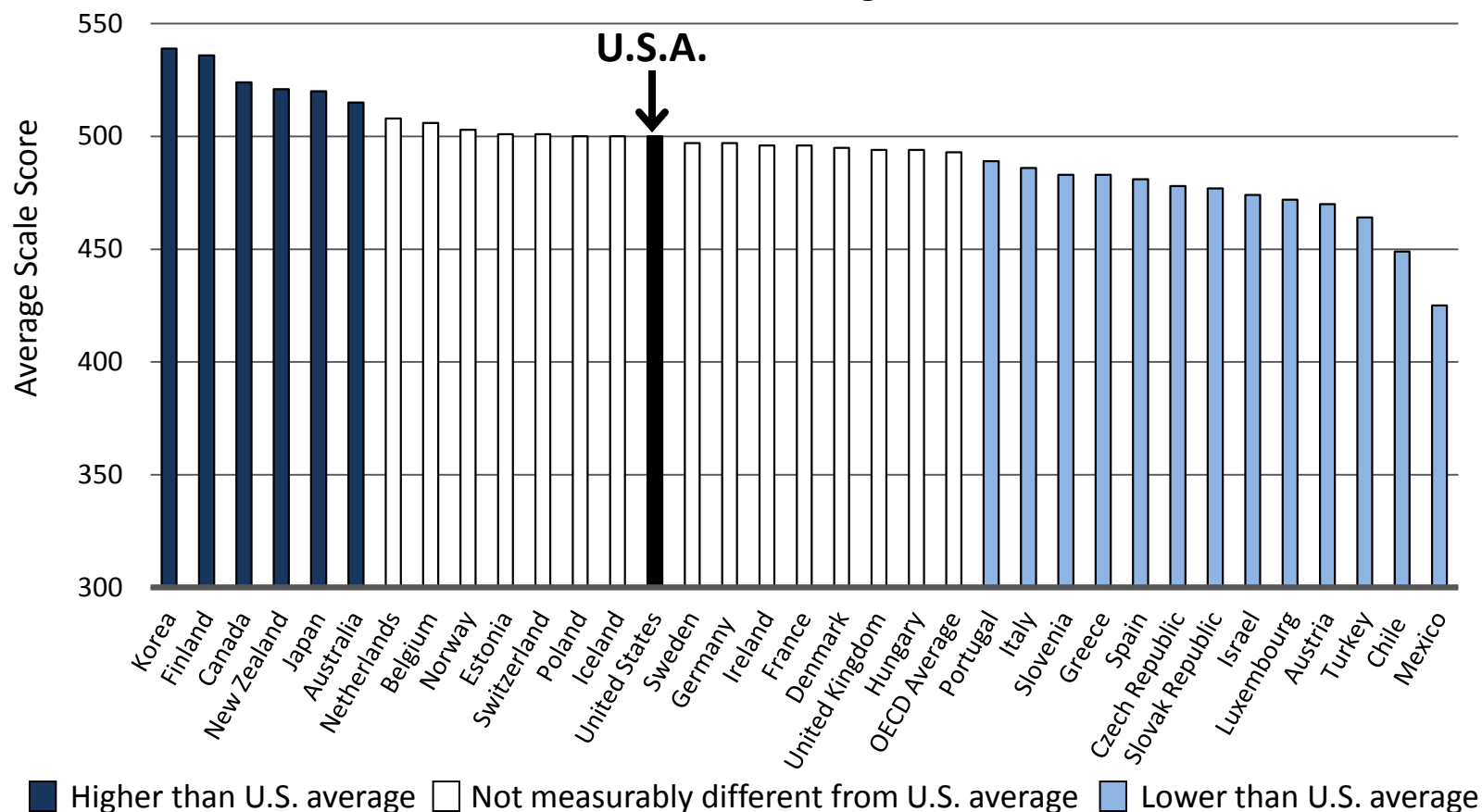
\*Denotes previous assessment format

Source: NAEP 2008 Trends in Academic Progress, NCES

And no matter how you cut the data, our students aren't doing well compared to their peers in other countries.

# Of 34 OECD Countries, U.S.A. Ranks 12<sup>th</sup> in Reading Literacy

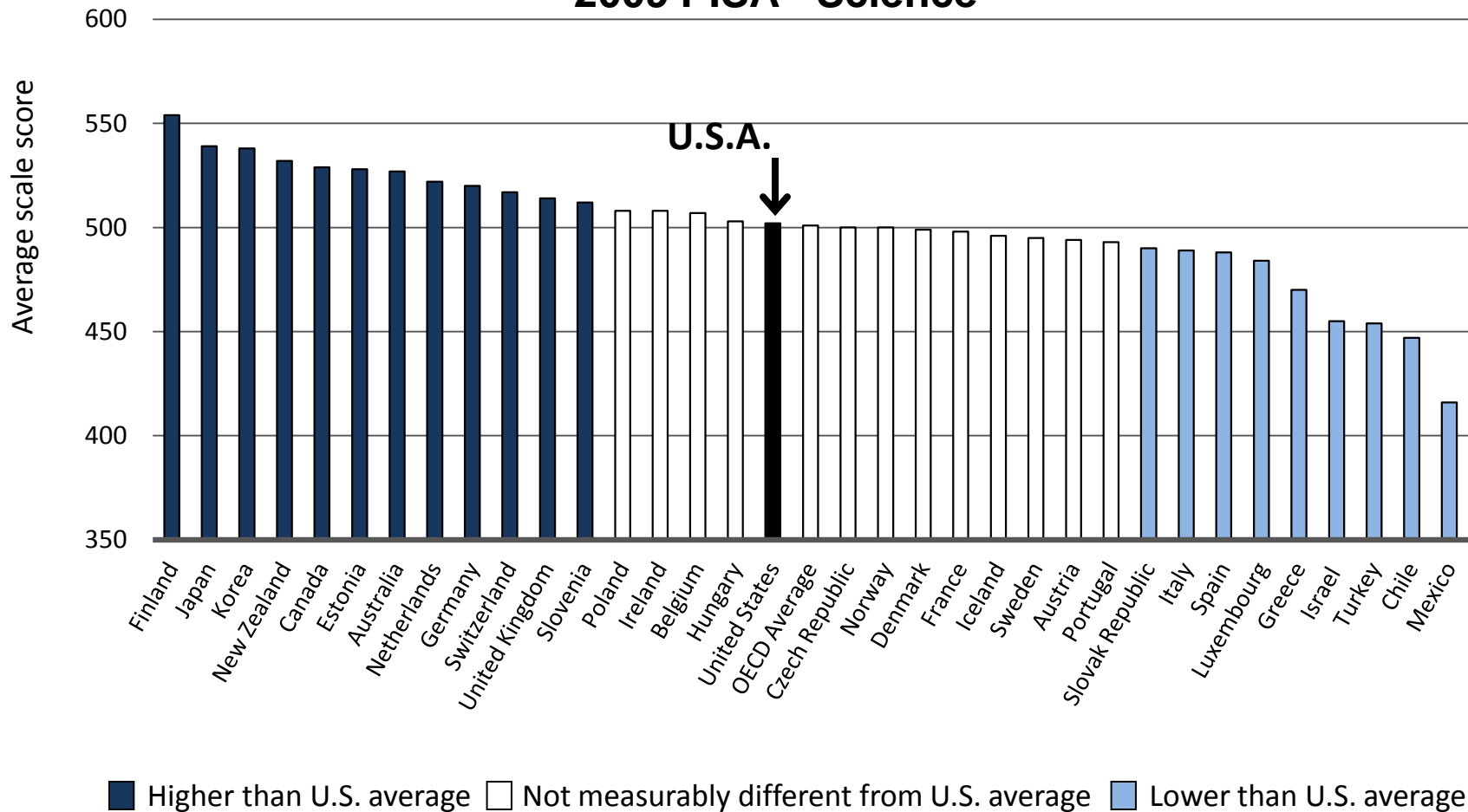
2009 PISA - Reading



Source: "Highlights from PISA 2009," NCES, 2010

# Of 34 OECD Countries, U.S.A. Ranks 17<sup>th</sup> in Science

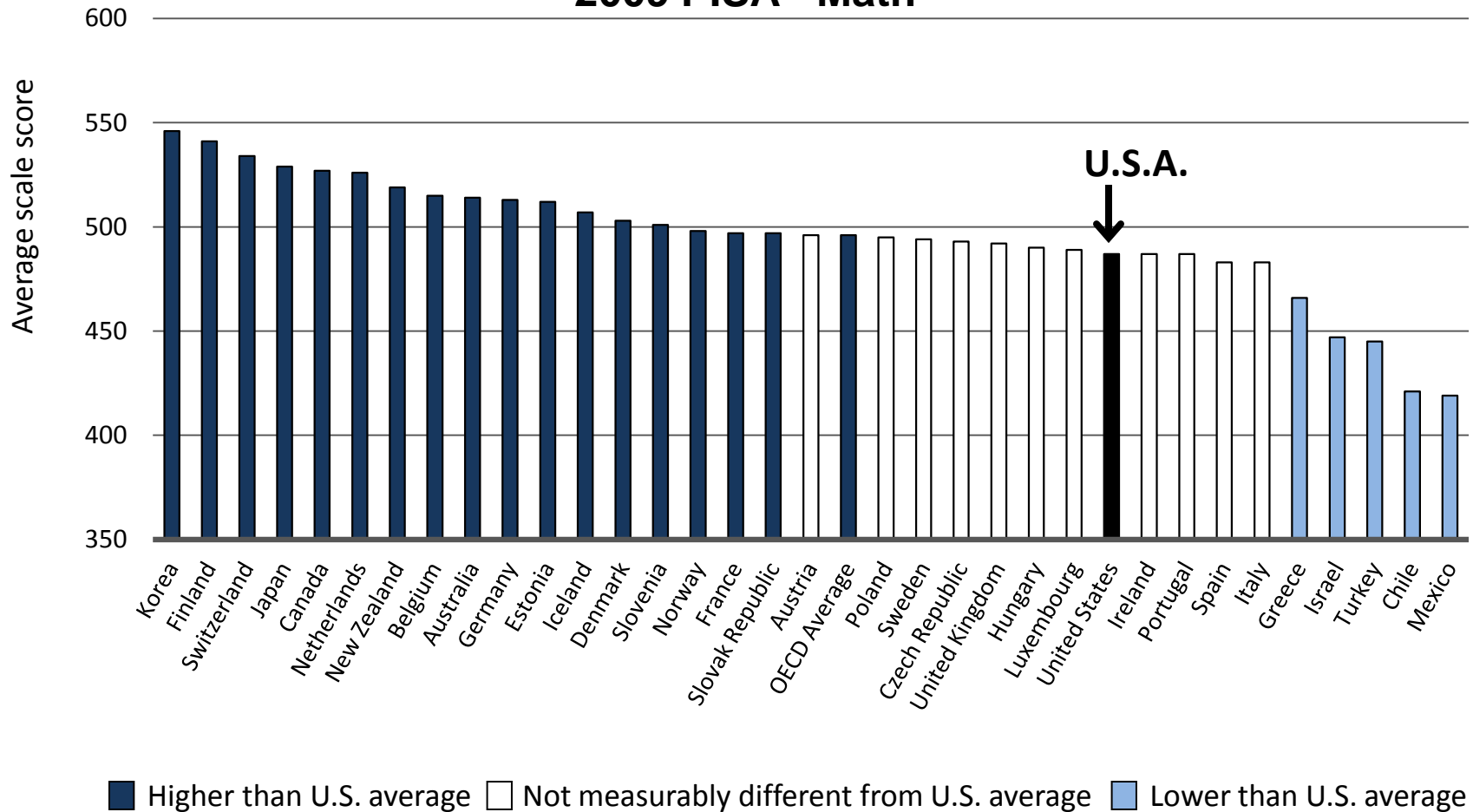
## 2009 PISA - Science



Source: "Highlights from PISA 2009," NCES, 2010

# Of 34 OECD Countries, U.S.A. Ranks 25<sup>th</sup> in Math

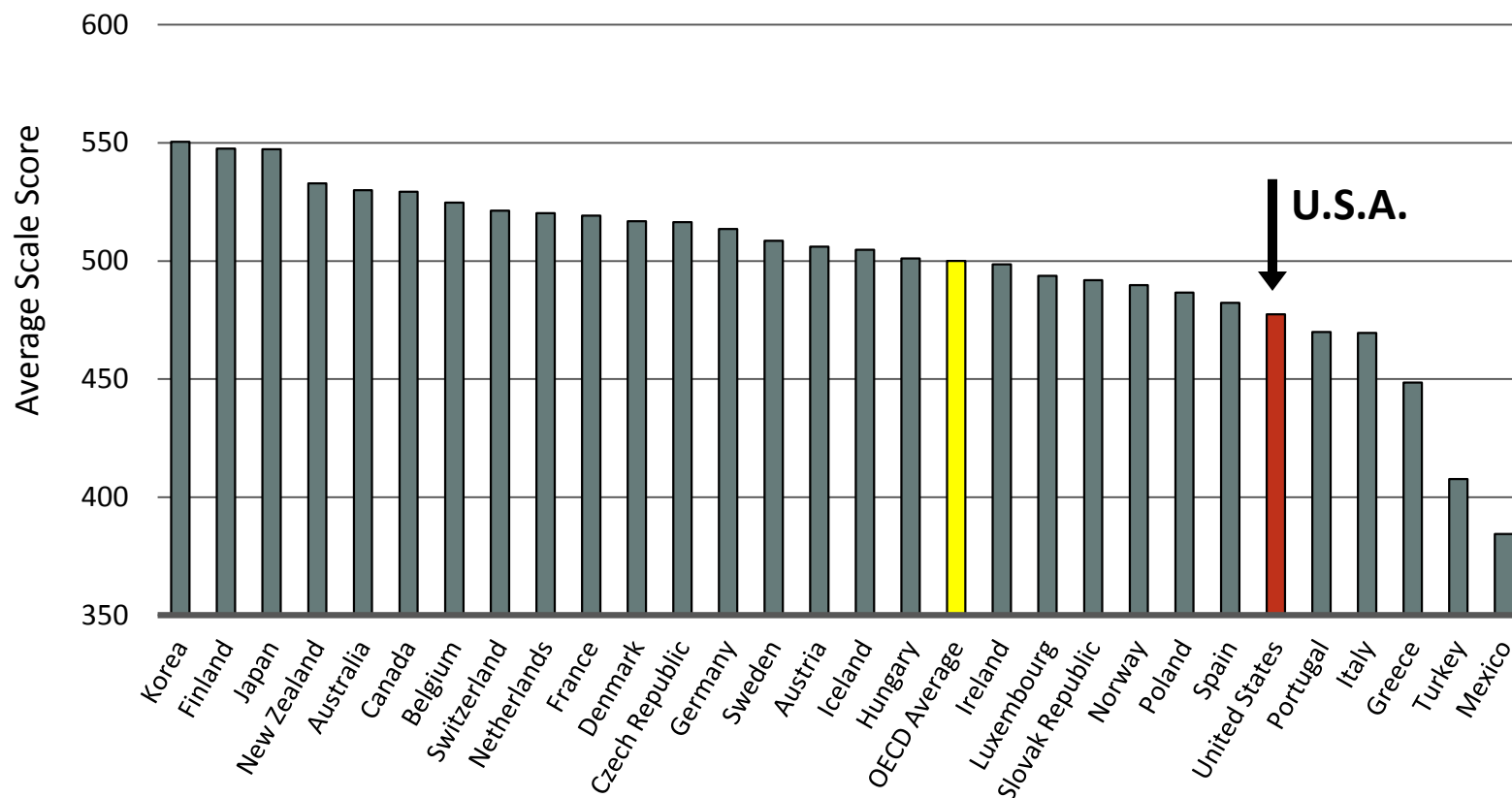
## 2009 PISA - Math



Source: "Highlights from PISA 2009," NCES, 2010

# U.S.A. Ranks 24<sup>th</sup> Out of 29 OECD Countries in Problem-Solving

2003 PISA





Only place we rank high?

Inequality.

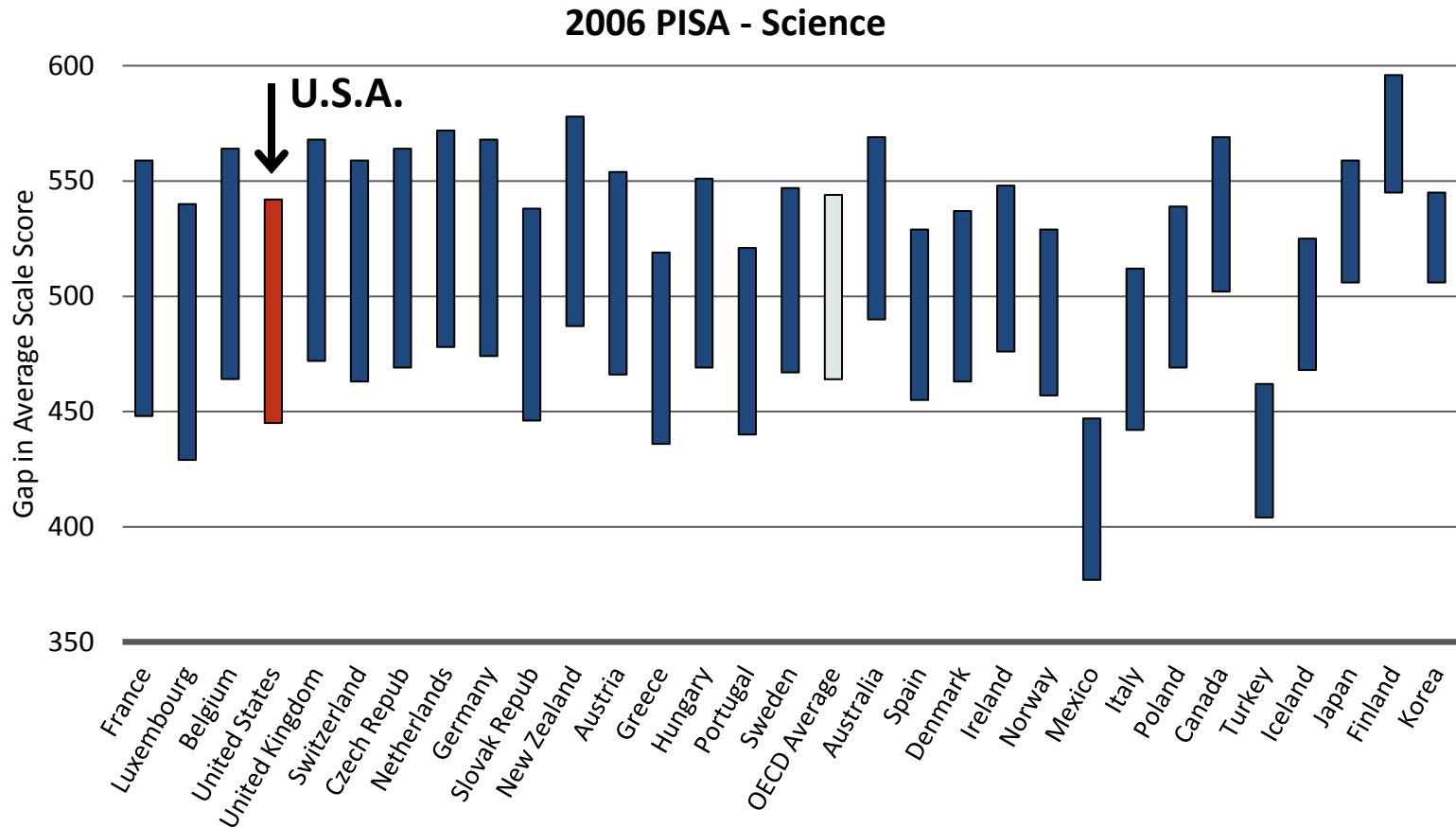
# PISA 2003: Gaps in Performance Of U.S.15 Year-Olds Are Among the Largest of OECD Countries

	Rank in Performance Gaps Between Highest and Lowest Achieving Students *
Mathematical Literacy	8 <sup>th</sup>
Problem Solving	6 <sup>th</sup>

**\*Of 29 OECD countries, based on scores of students at the 5<sup>th</sup> and 95<sup>th</sup> percentiles.**

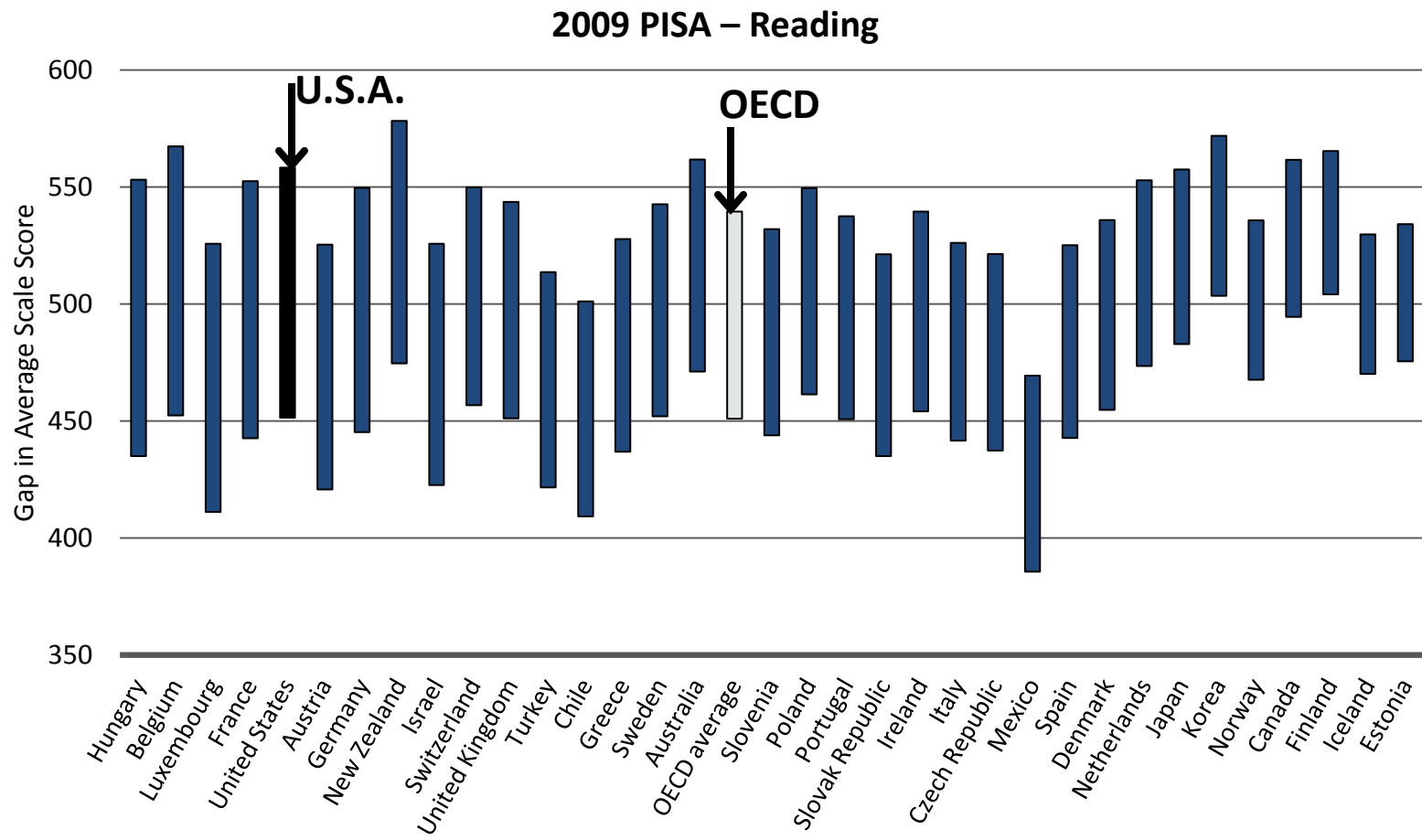
**Source:** Organization for Economic Cooperation and Development (OECD), PISA 2003 Results, data available at <http://www.oecd.org/>

# Among OECD Countries, U.S.A. has the 4<sup>th</sup> Largest Gap Between High-SES and Low-SES Students



Source: PISA 2006 Results, OECD, table 4.8b

# Among OECD Countries, U.S.A. has the 5<sup>th</sup> Largest Gap Between High-SES and Low-SES Students



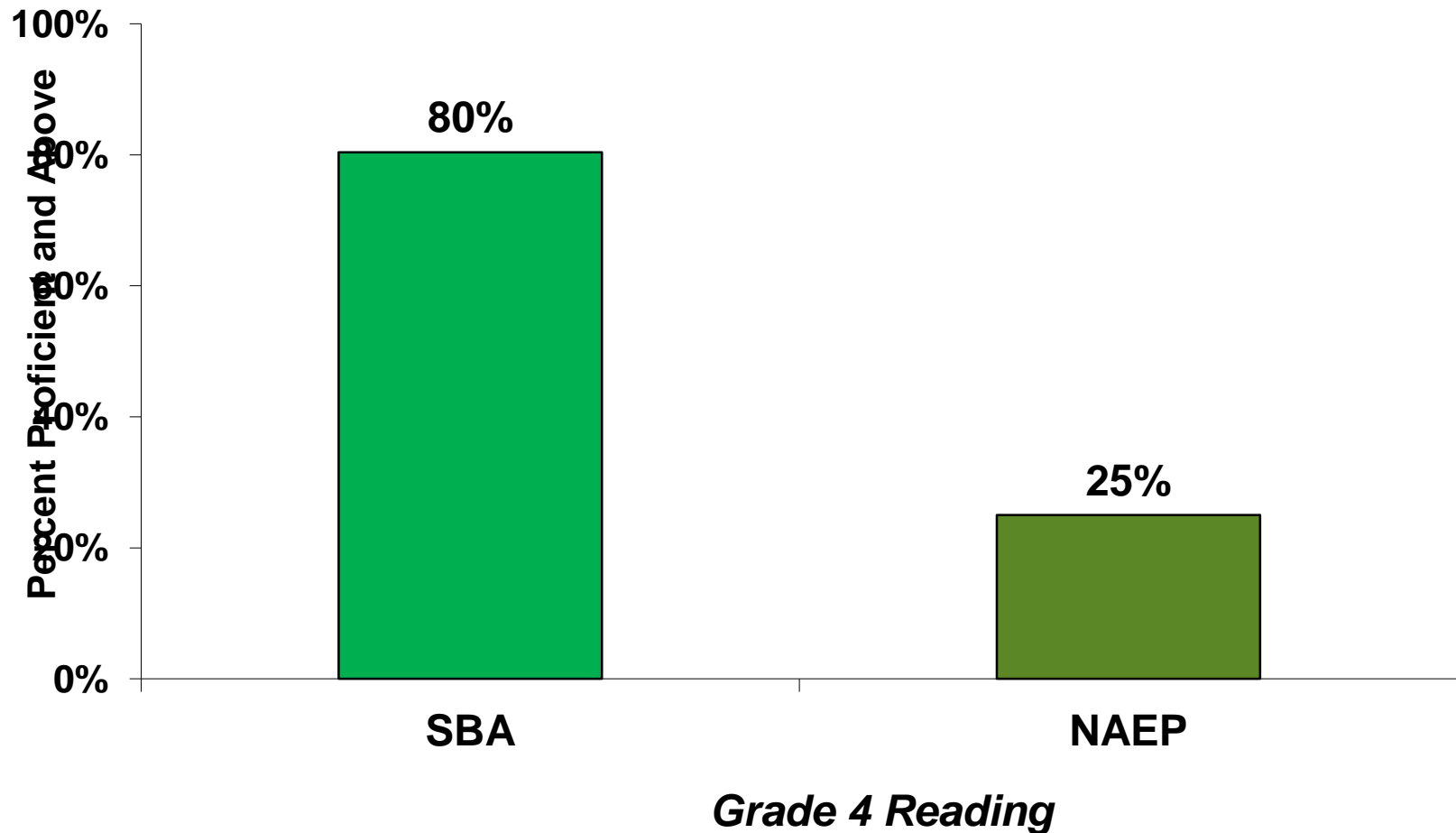
Source: PISA 2009 Results, OECD, Table II.3.1

How does Alaska fit in this  
context?

# 4<sup>th</sup> Grade Reading

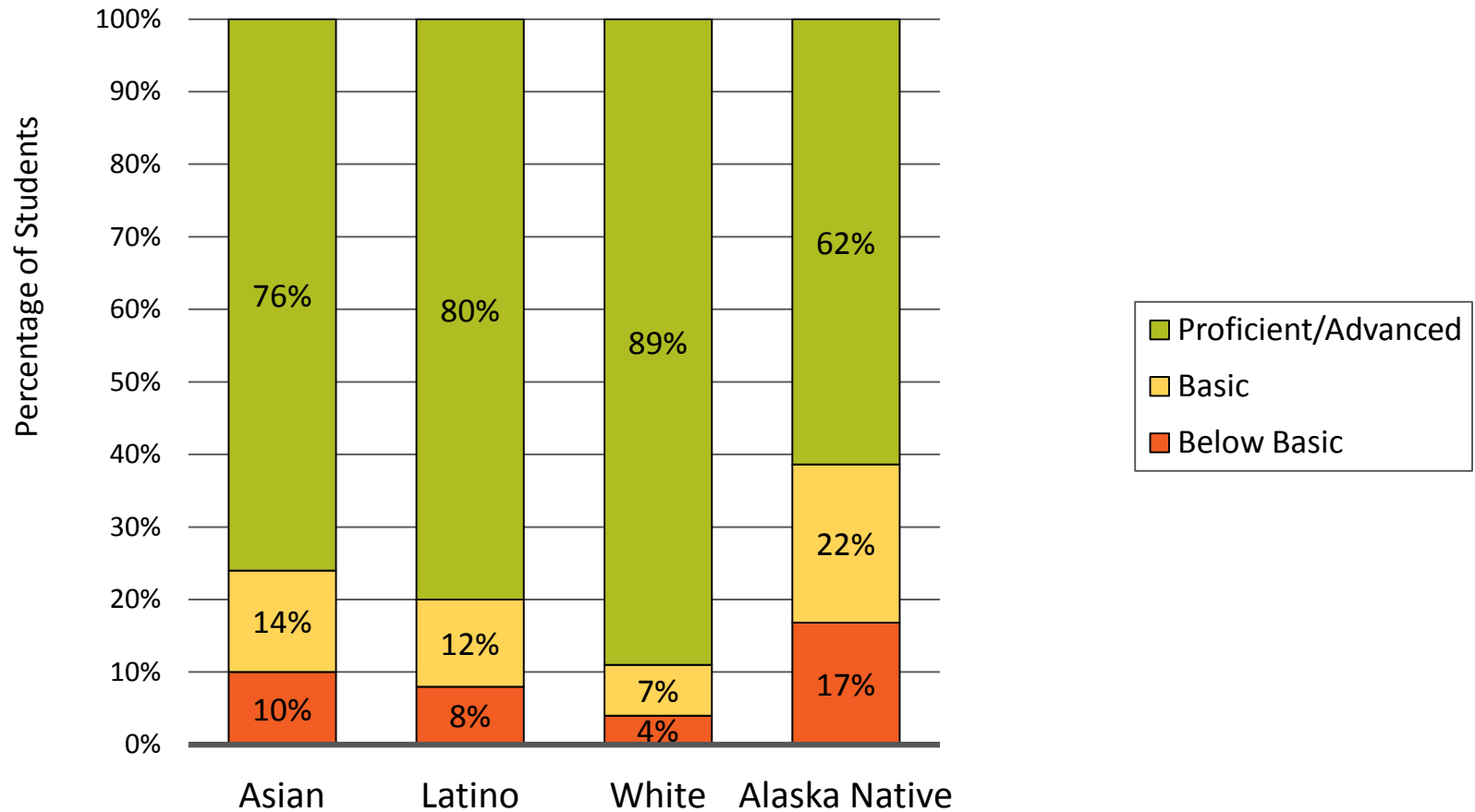
# Alaska: Student Performance on State Exams vs. National Assessment

## Grade 4 Reading 2010, 11



# 2010 SBA Grade 4 Reading

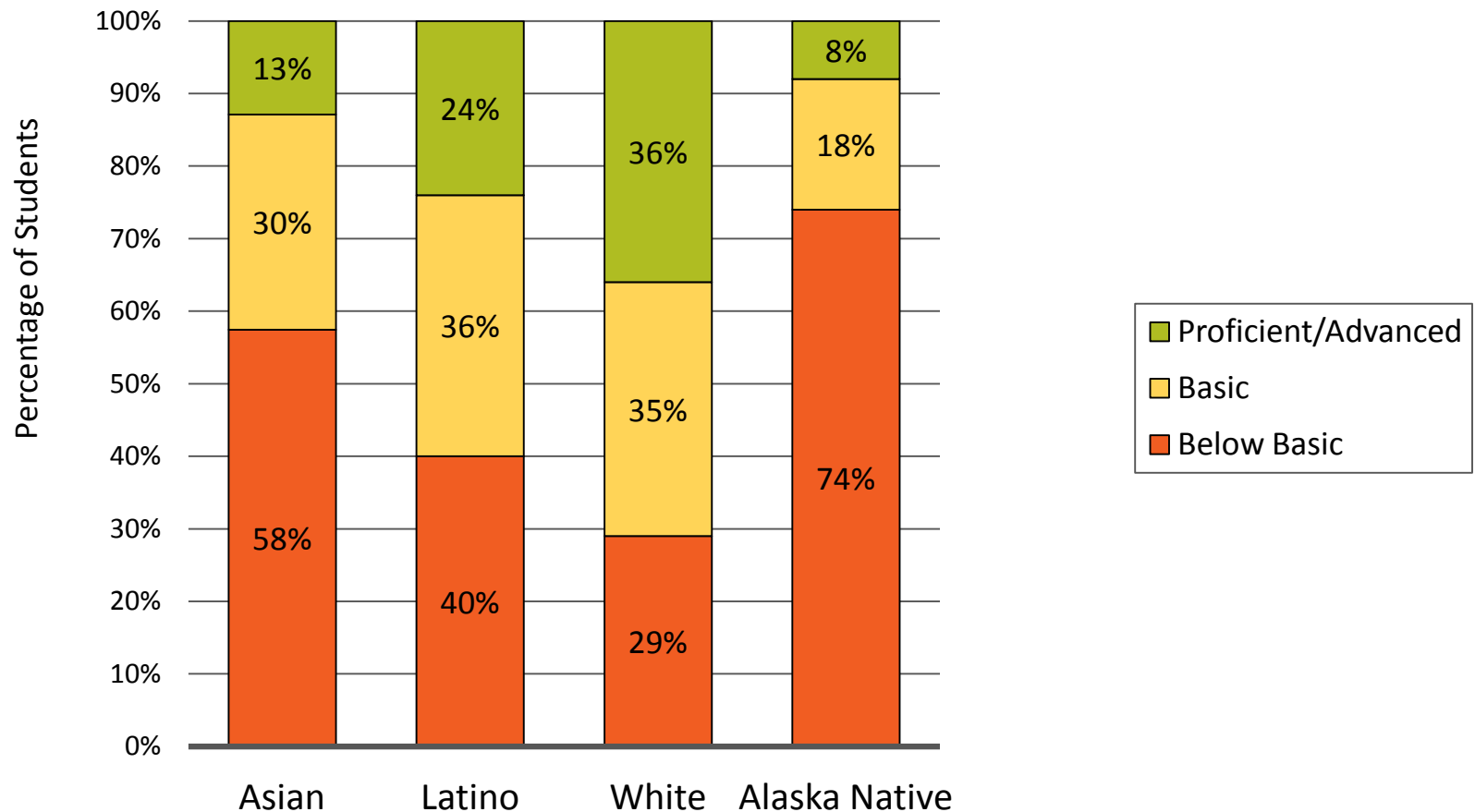
## By Race/Ethnicity – Alaska





# 2011 NAEP Grade 4 Reading

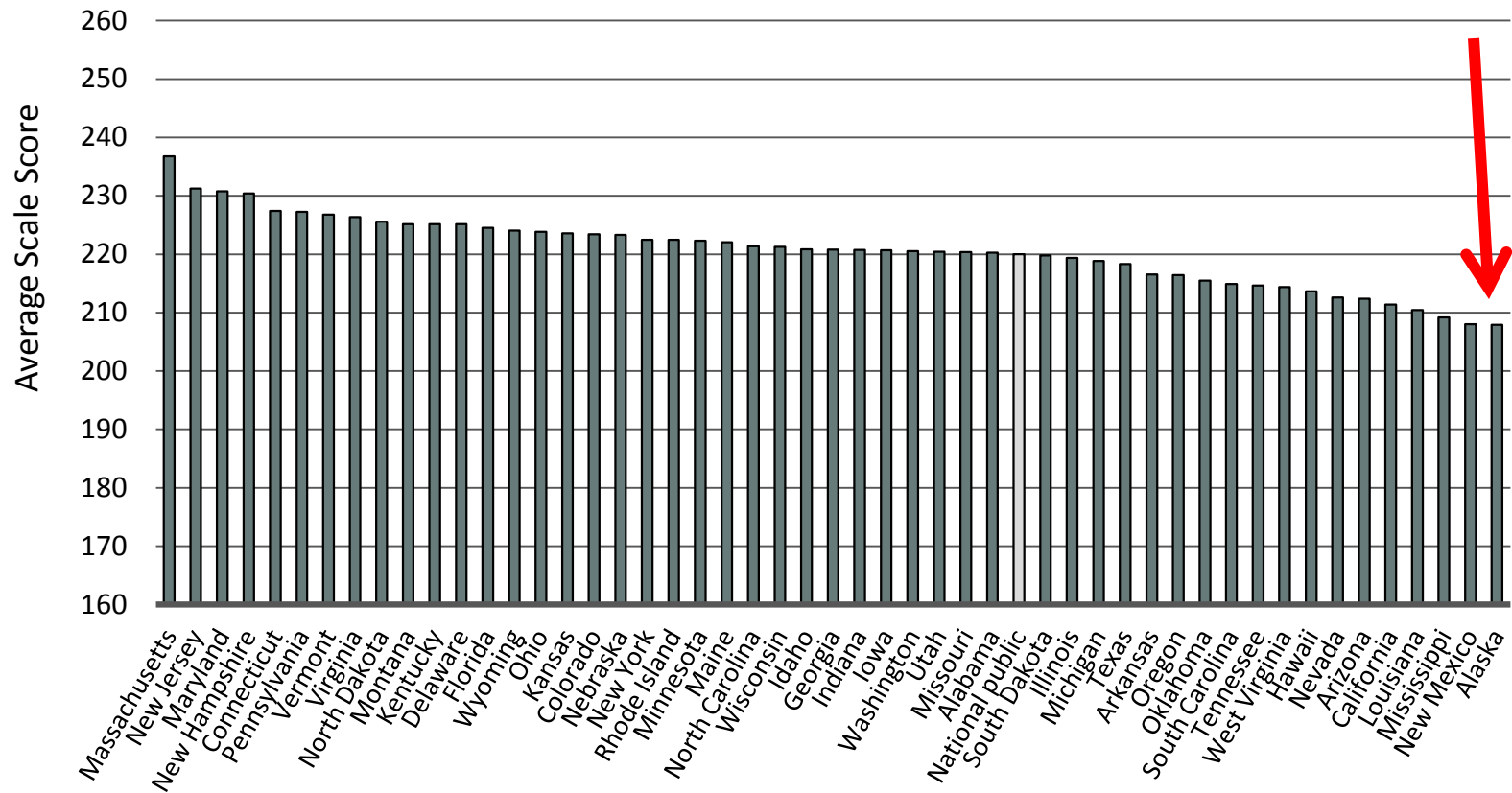
## By Race/Ethnicity – Alaska



Compared with other states?

# Scale Scores by State – All Students

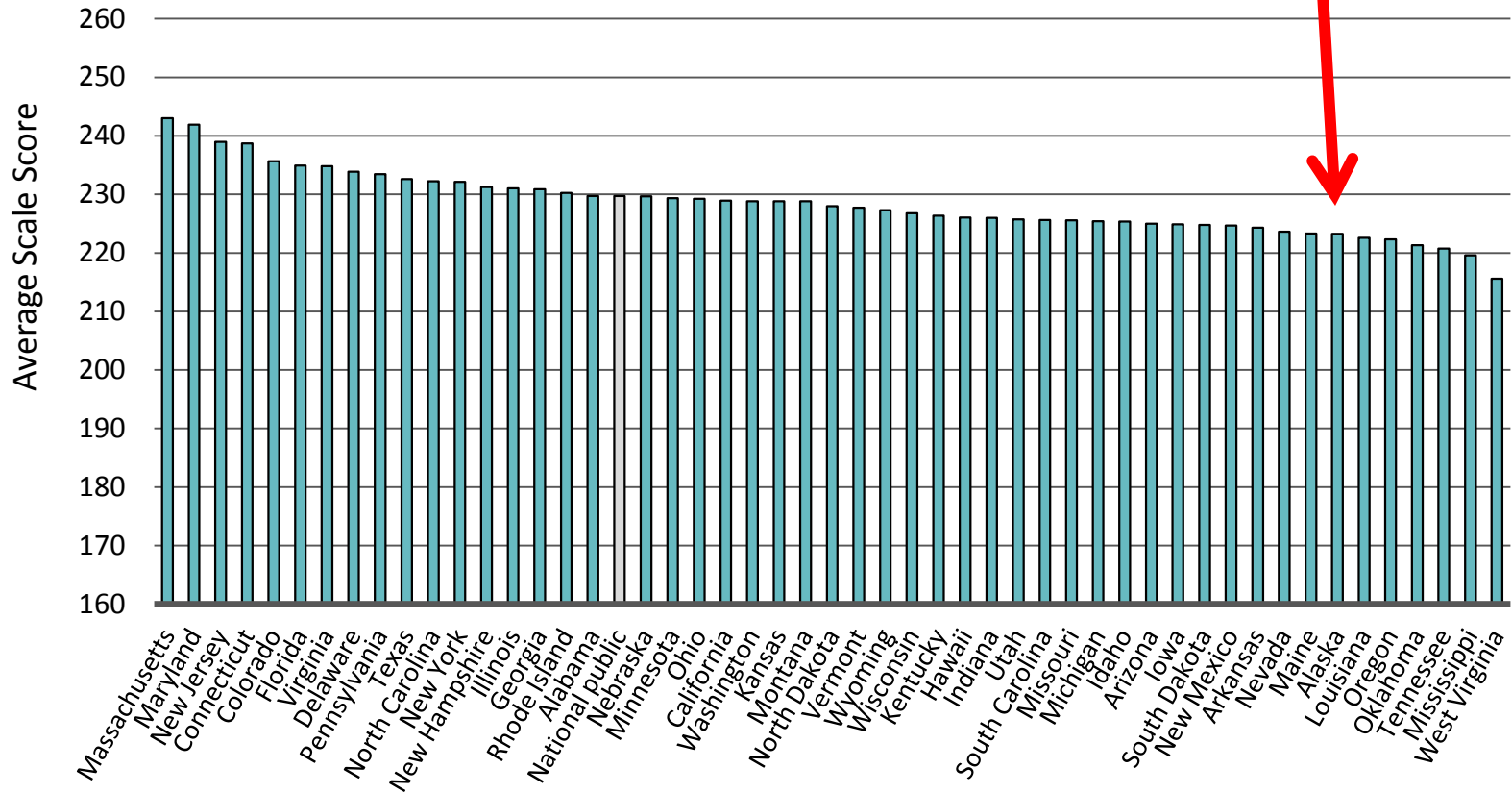
## Grade 4 – NAEP Reading (2011)



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 238)

# Scale Scores by State – White Students

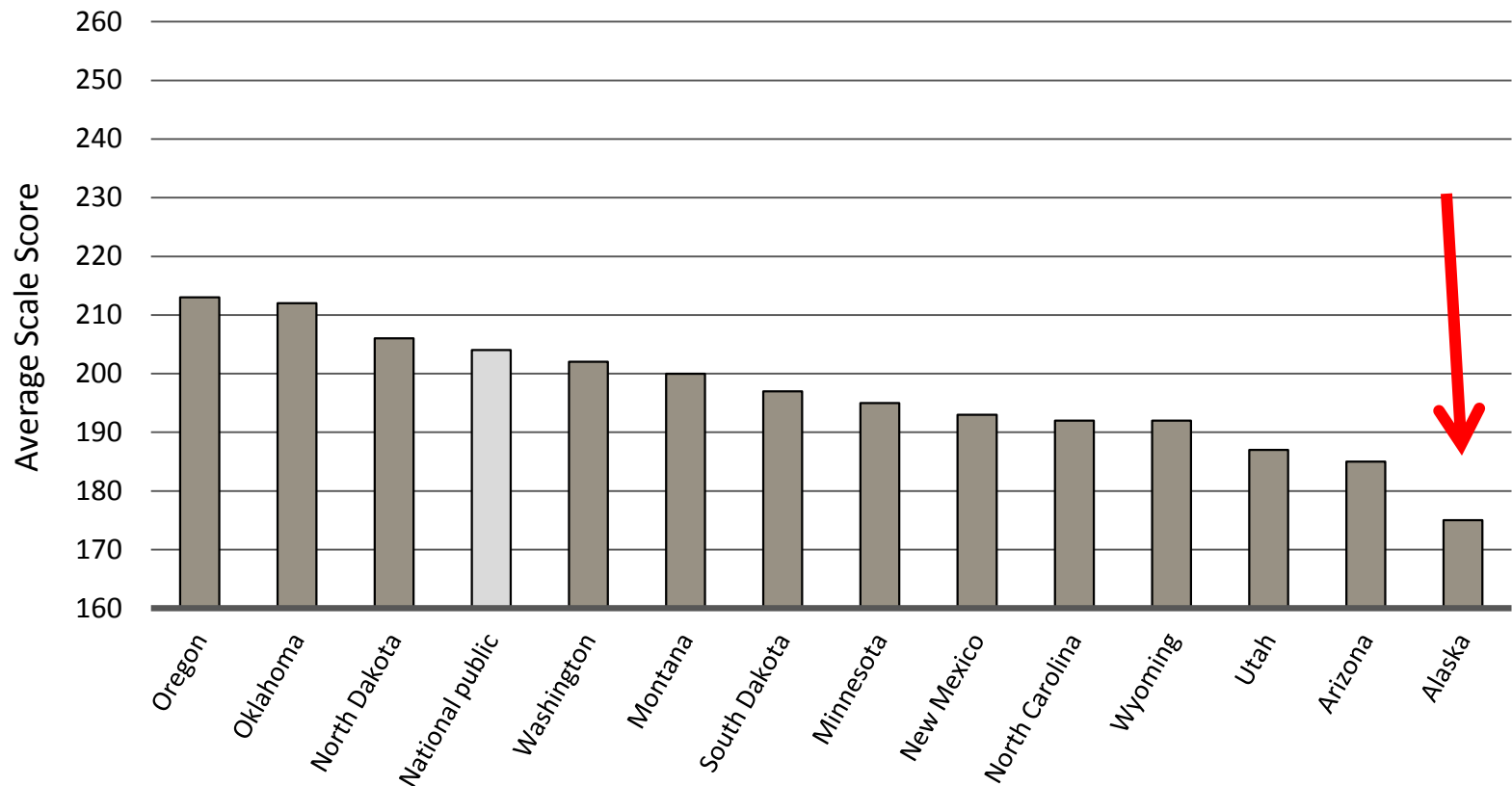
## Grade 4 – NAEP Reading (2011)



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 238)

# Scale Scores by State – American Indian/Alaska Native Students

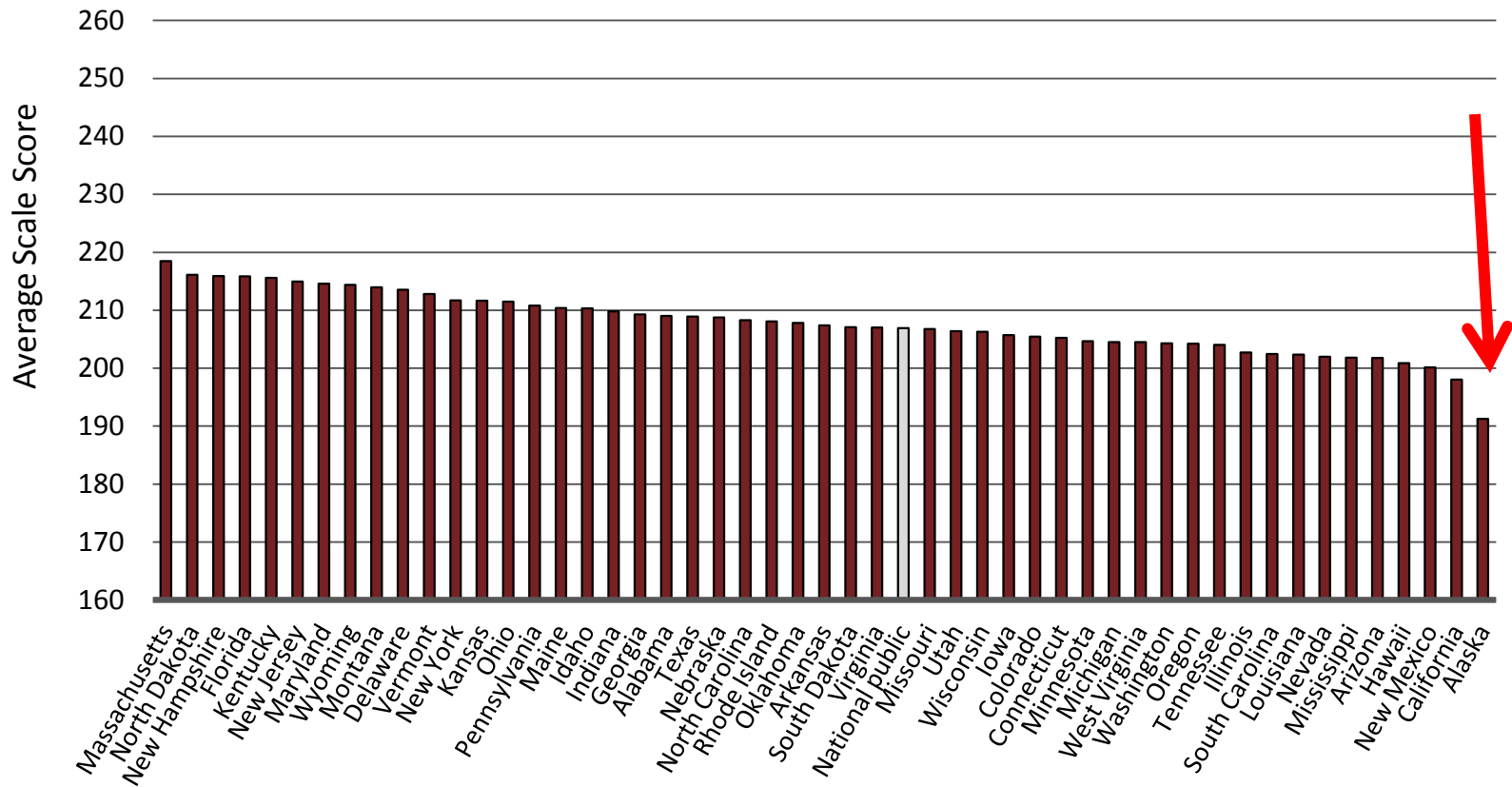
## Grade 4 – NAEP Reading (2011)



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 238)

# Scale Scores by State – Low-Income Students

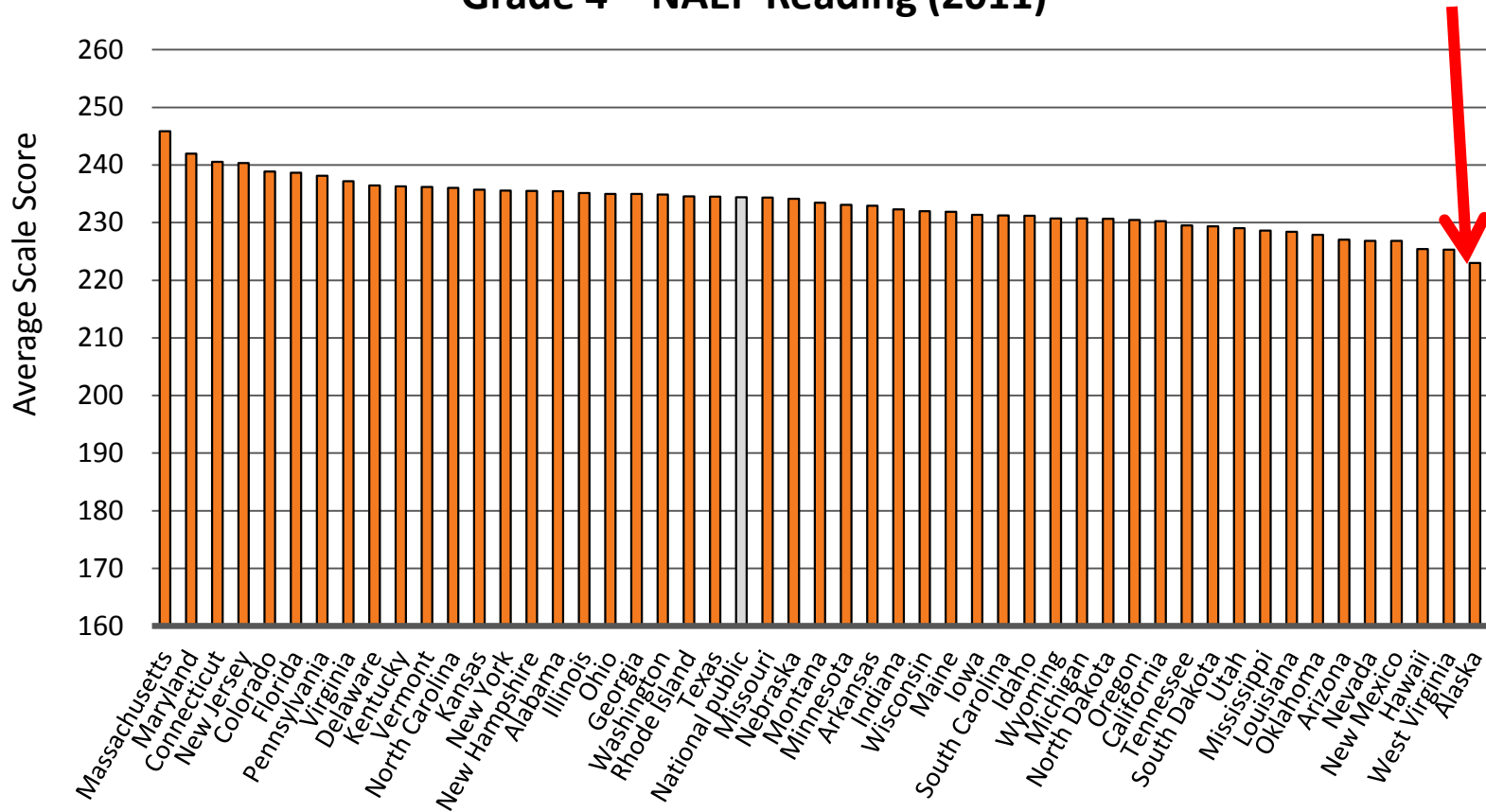
## Grade 4 – NAEP Reading (2011)



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 238)

# Scale Scores by State – Higher Income Students

## Grade 4 – NAEP Reading (2011)



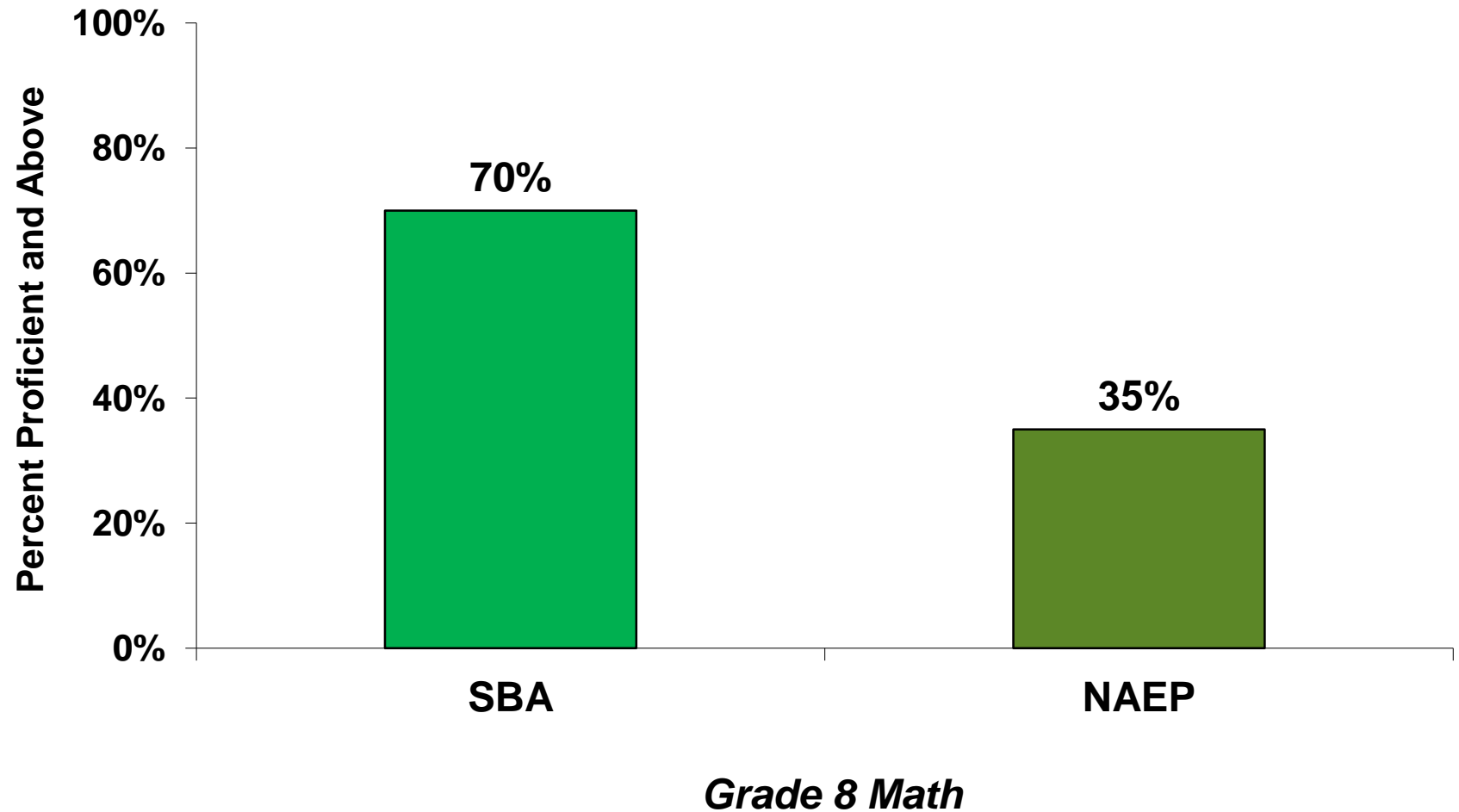
Source: NAEP Data Explorer, NCES (Proficient Scale Score = 238)

# 8<sup>th</sup> Grade Math



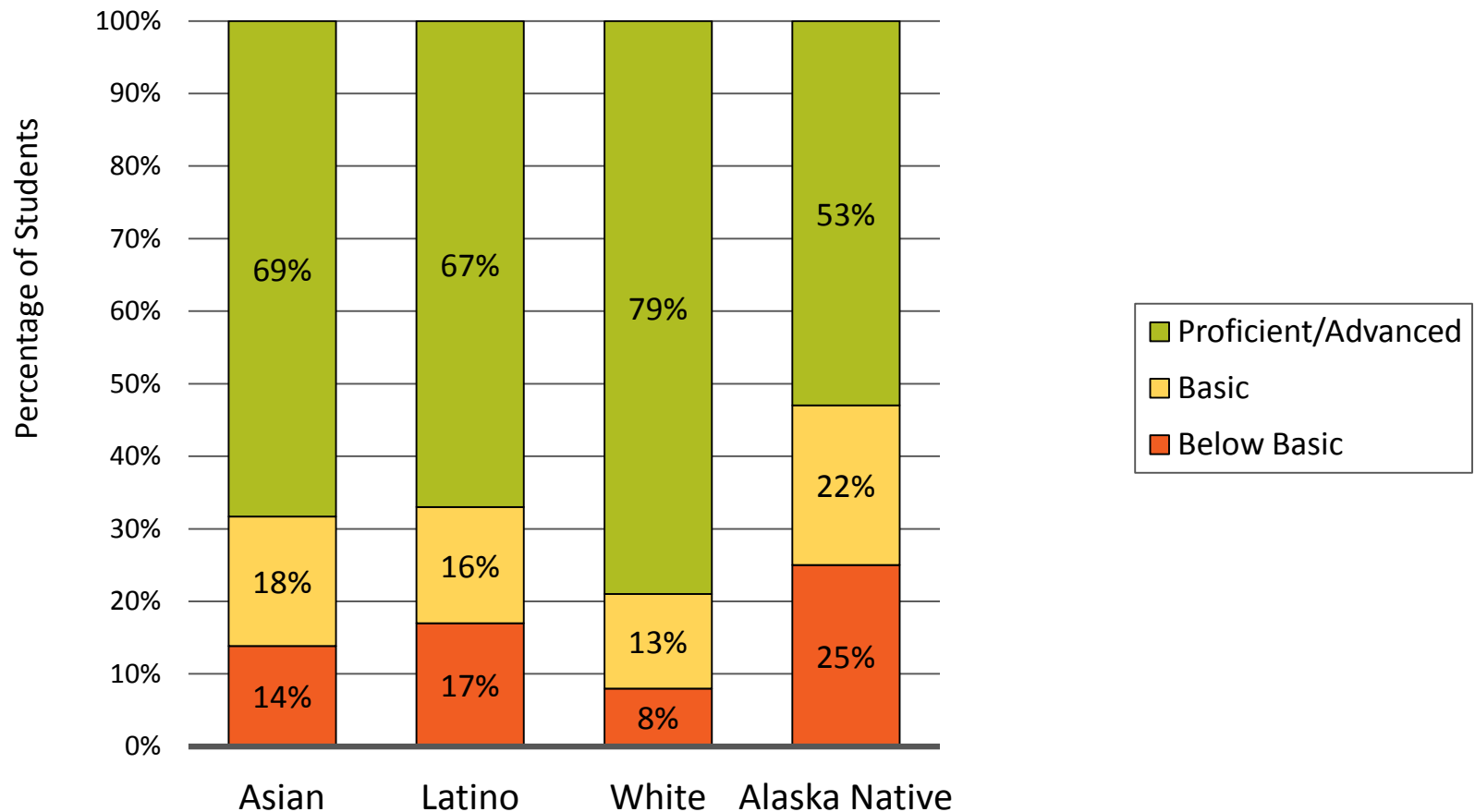
# Alaska: Student Performance on State Exams vs. National Assessment

## Grade 8 Math 2010,11



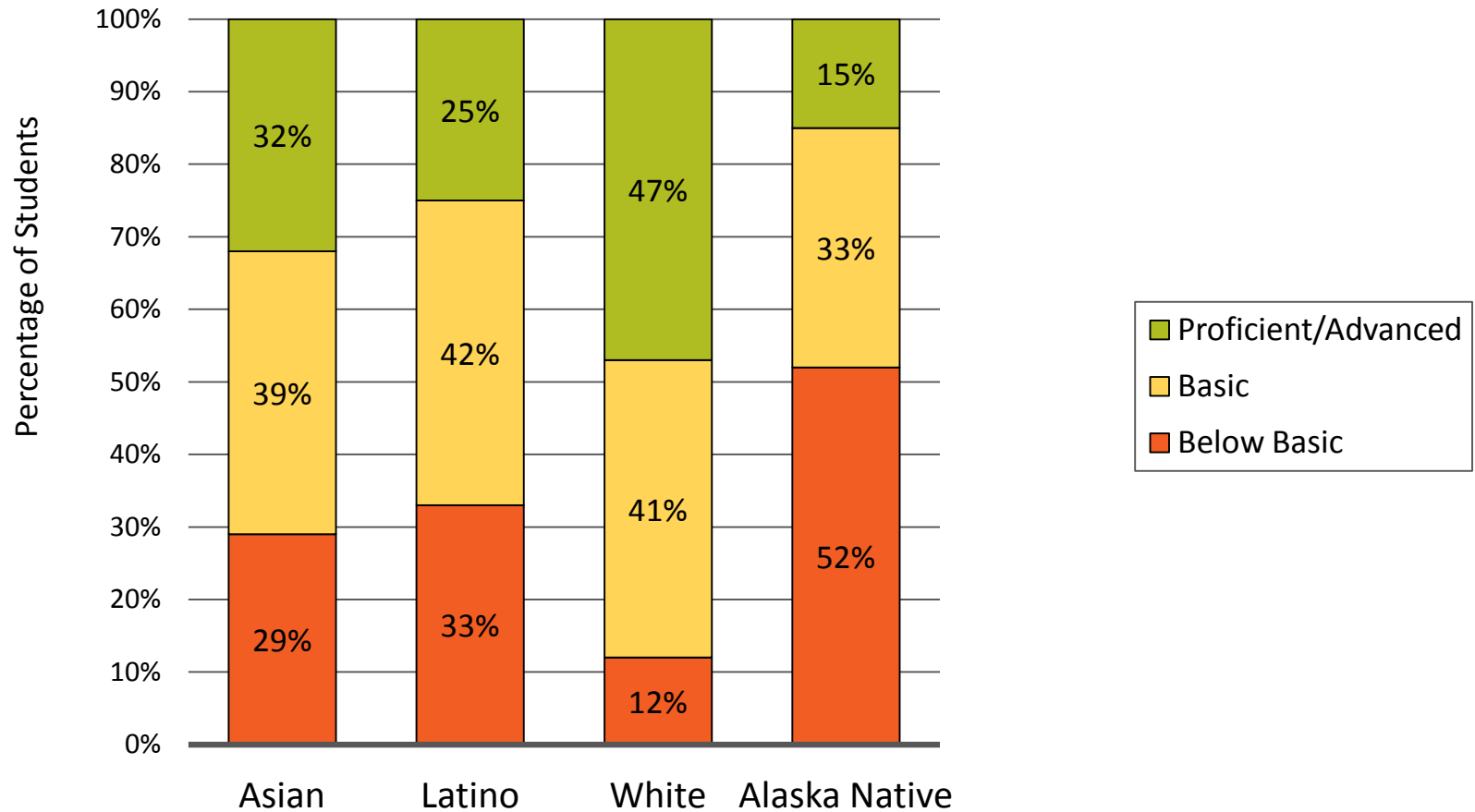
# 2010 SBA Grade 8 Math

## By Race/Ethnicity – Alaska



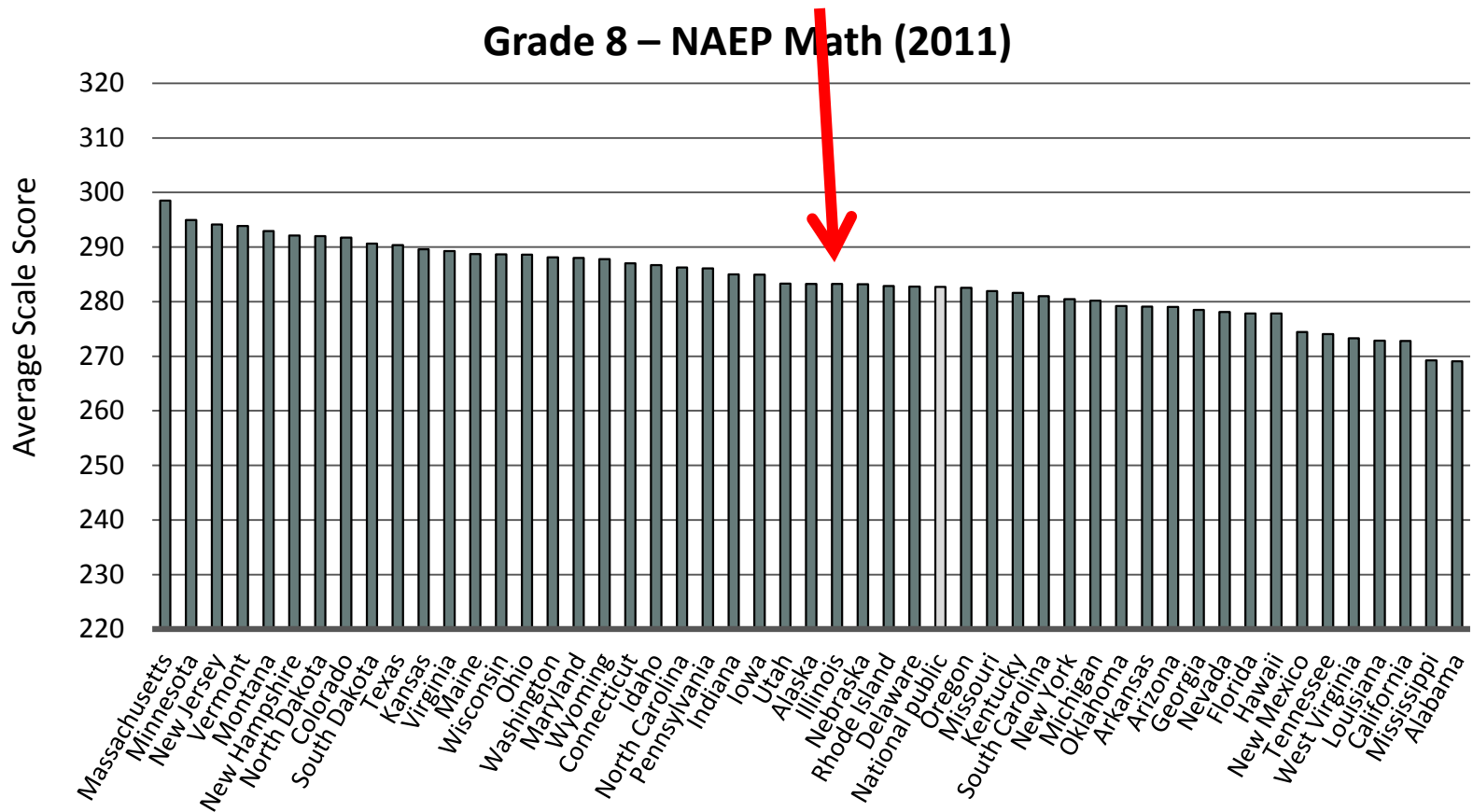
# 2011 NAEP Grade 8 Math

## By Race/Ethnicity – Alaska



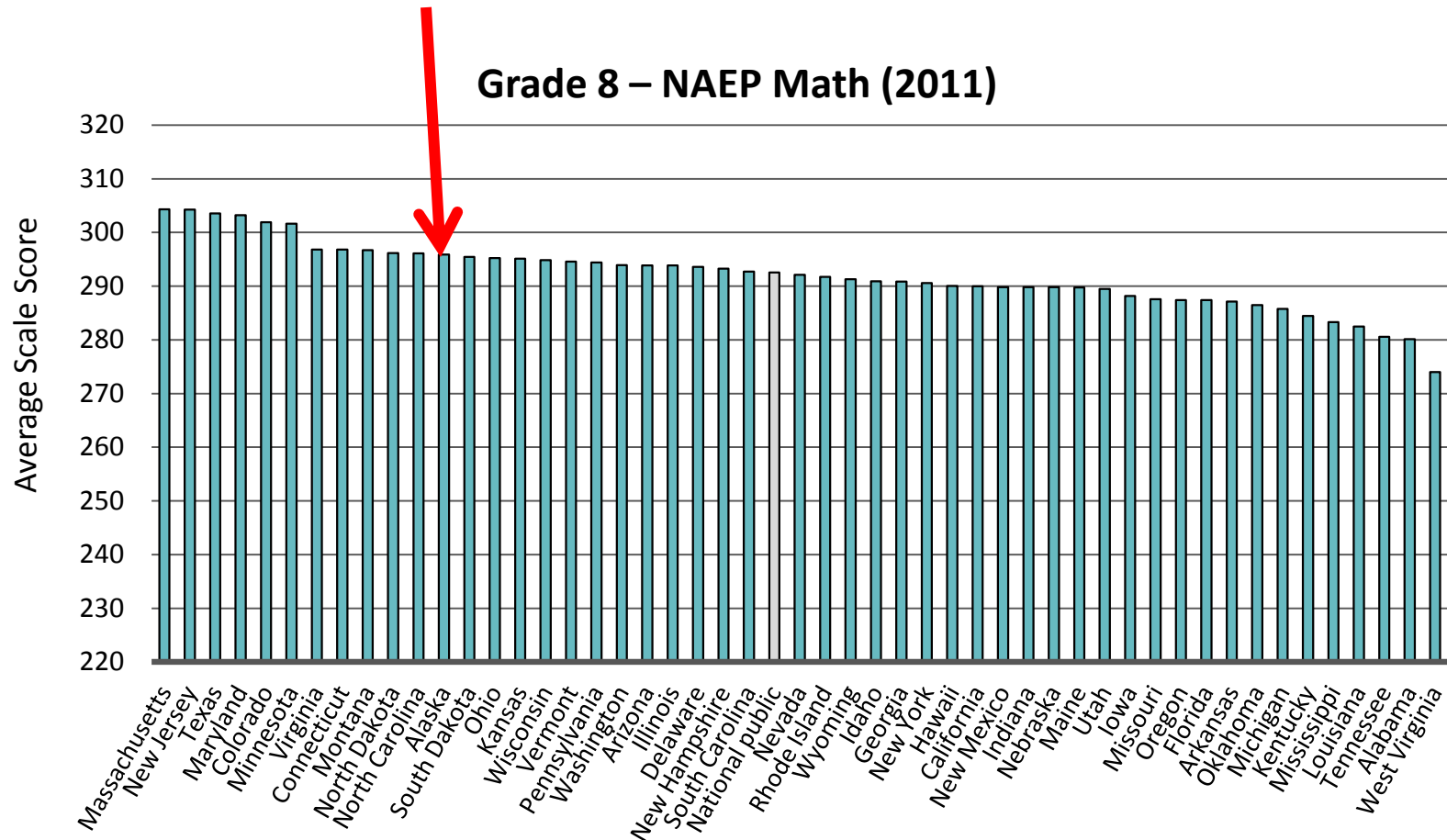
Compared with other states?

# Scale Scores by State – All Students



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 299)

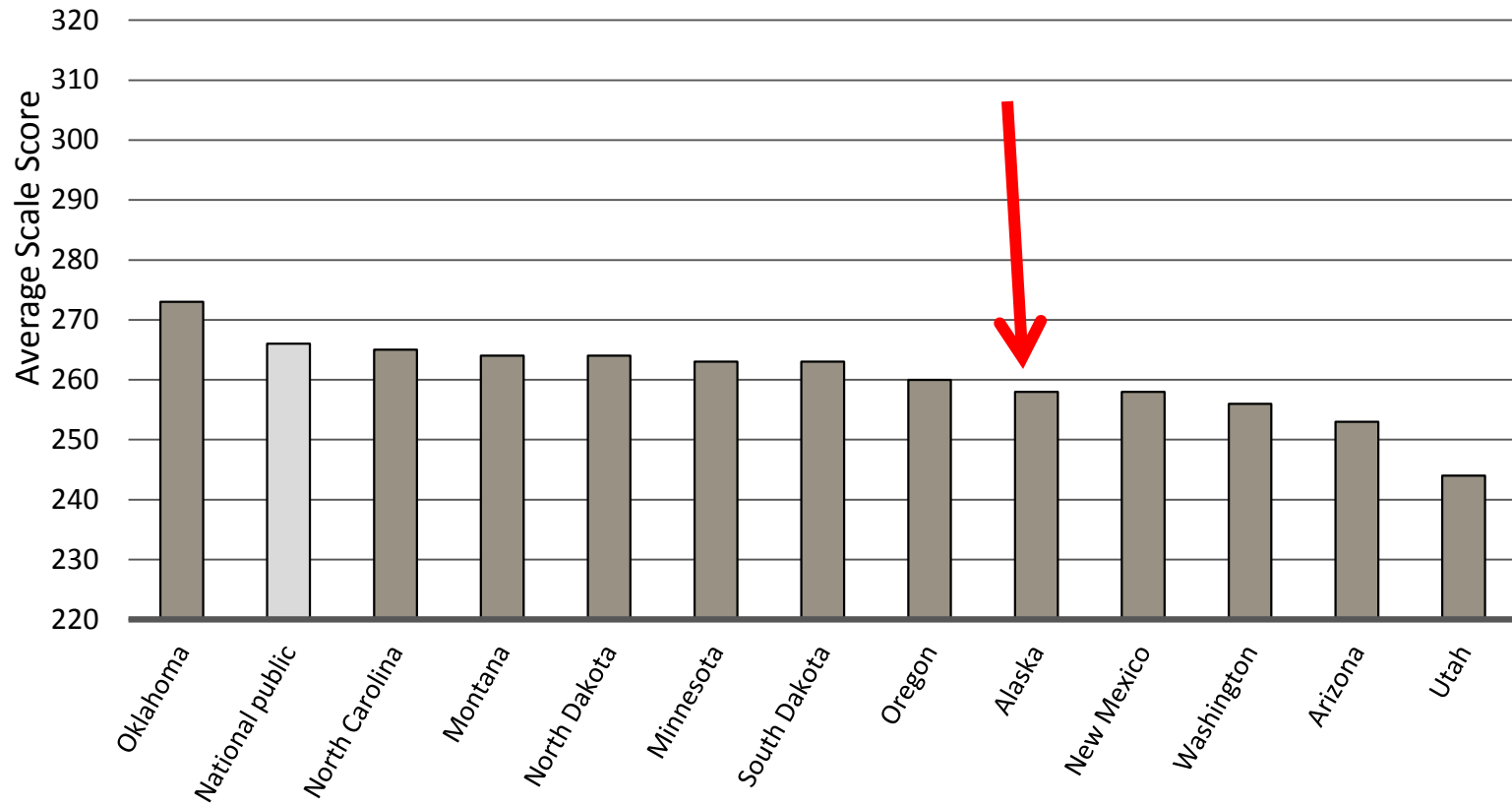
# Scale Scores by State – White Students



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 299)

# Scale Scores by State – American Indian/Alaska Native Students

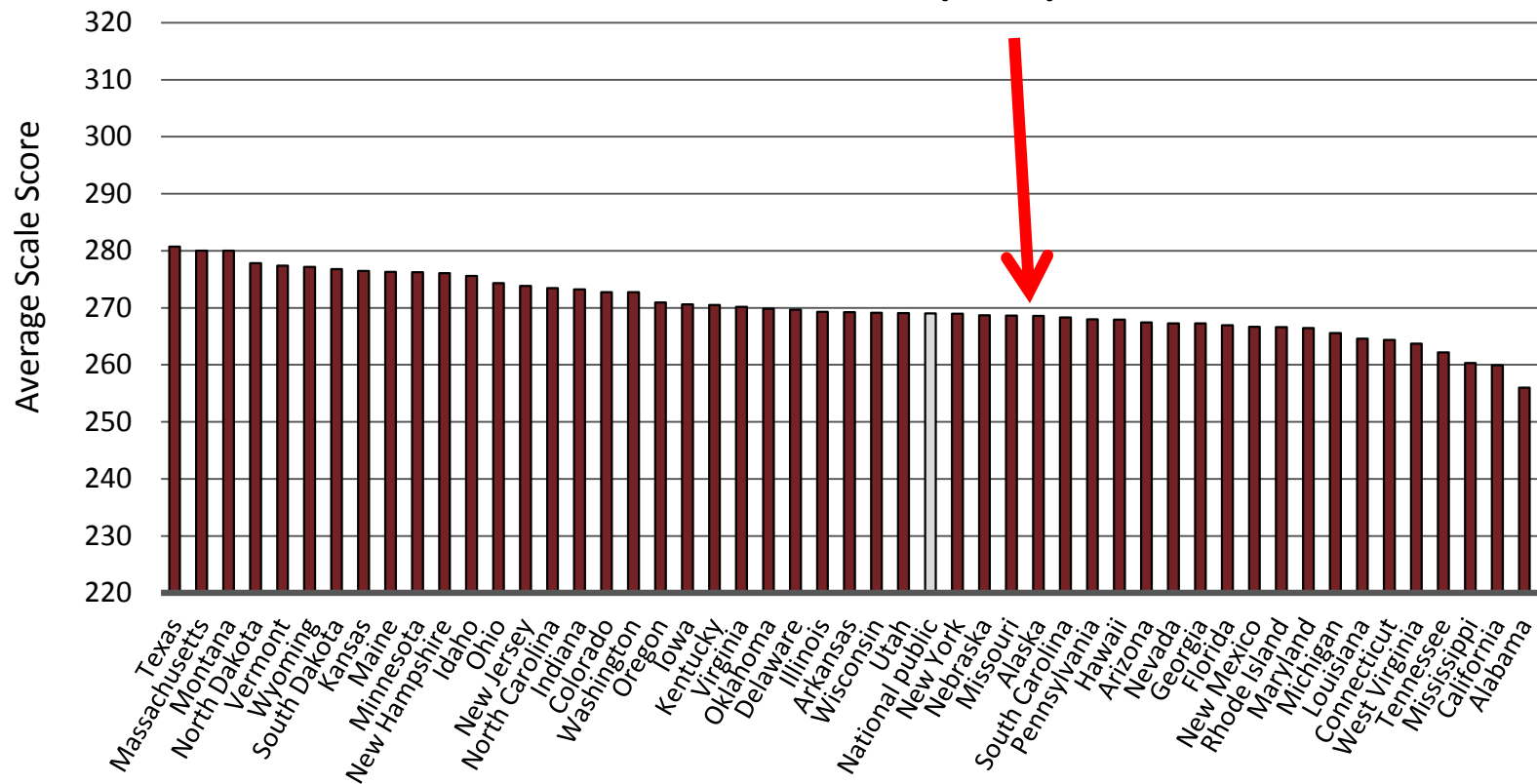
## Grade 8 – NAEP Math (2011)



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 299)

# Scale Scores by State – Low-Income Students

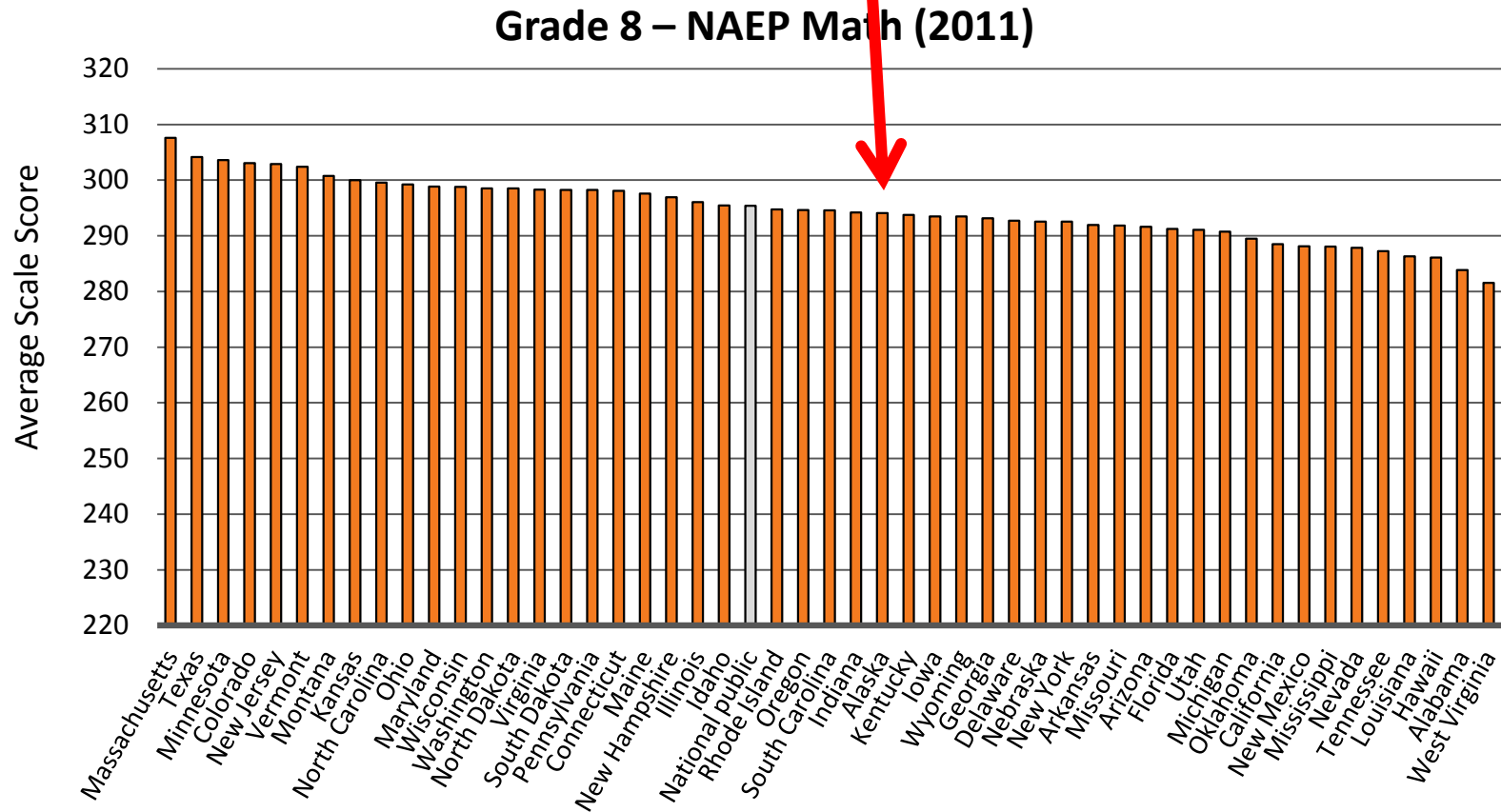
## Grade 8 – NAEP Math (2011)



Source: NAEP Data Explorer, NCES (Proficient Scale Score = 299)



# Scale Scores by State – Higher Income Students

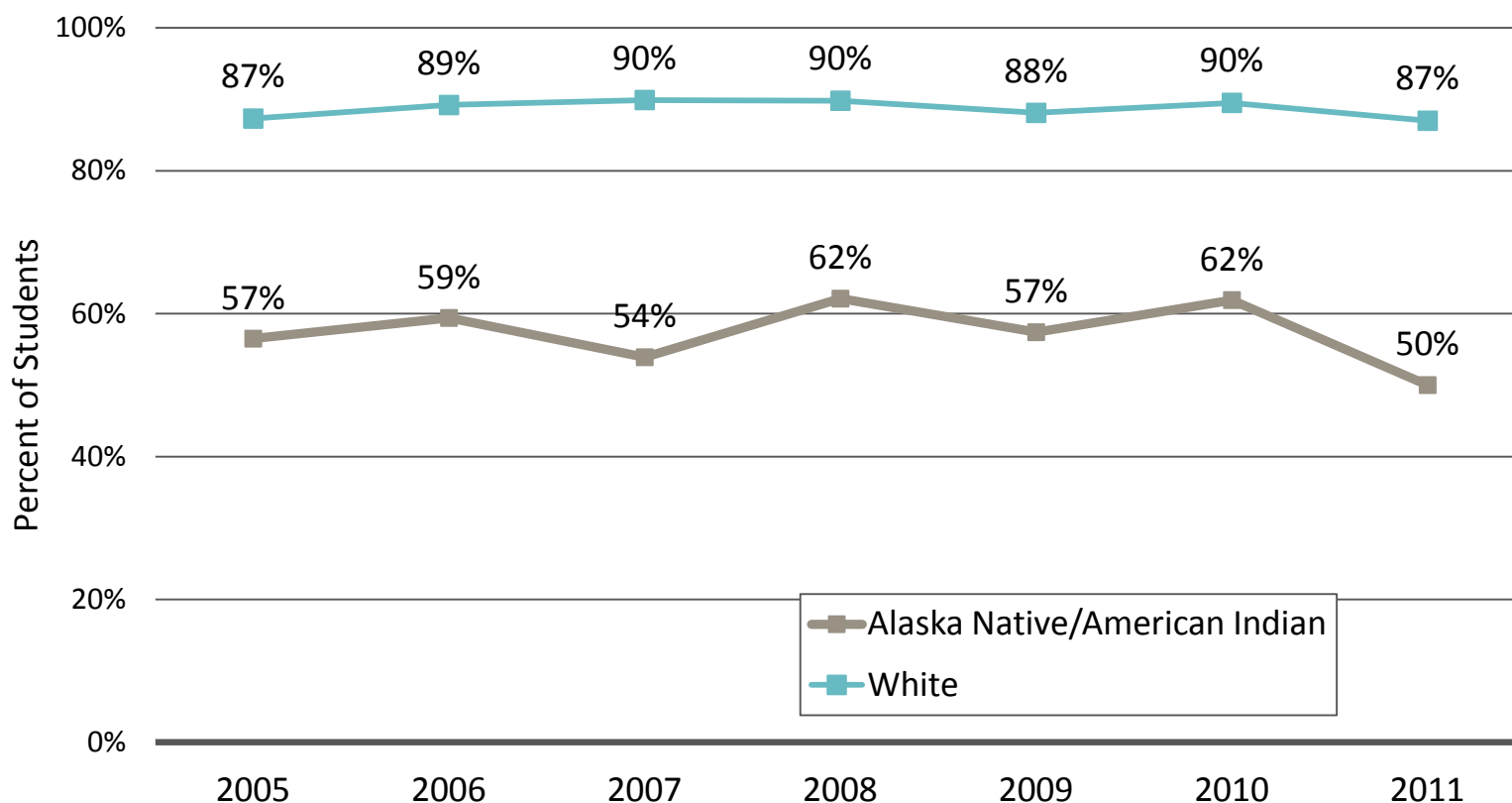


Source: NAEP Data Explorer, NCES (Proficient Scale Score = 299)

Trends on state exams provide  
reason to hope?

# Persistently Large Gaps Between Groups of Students

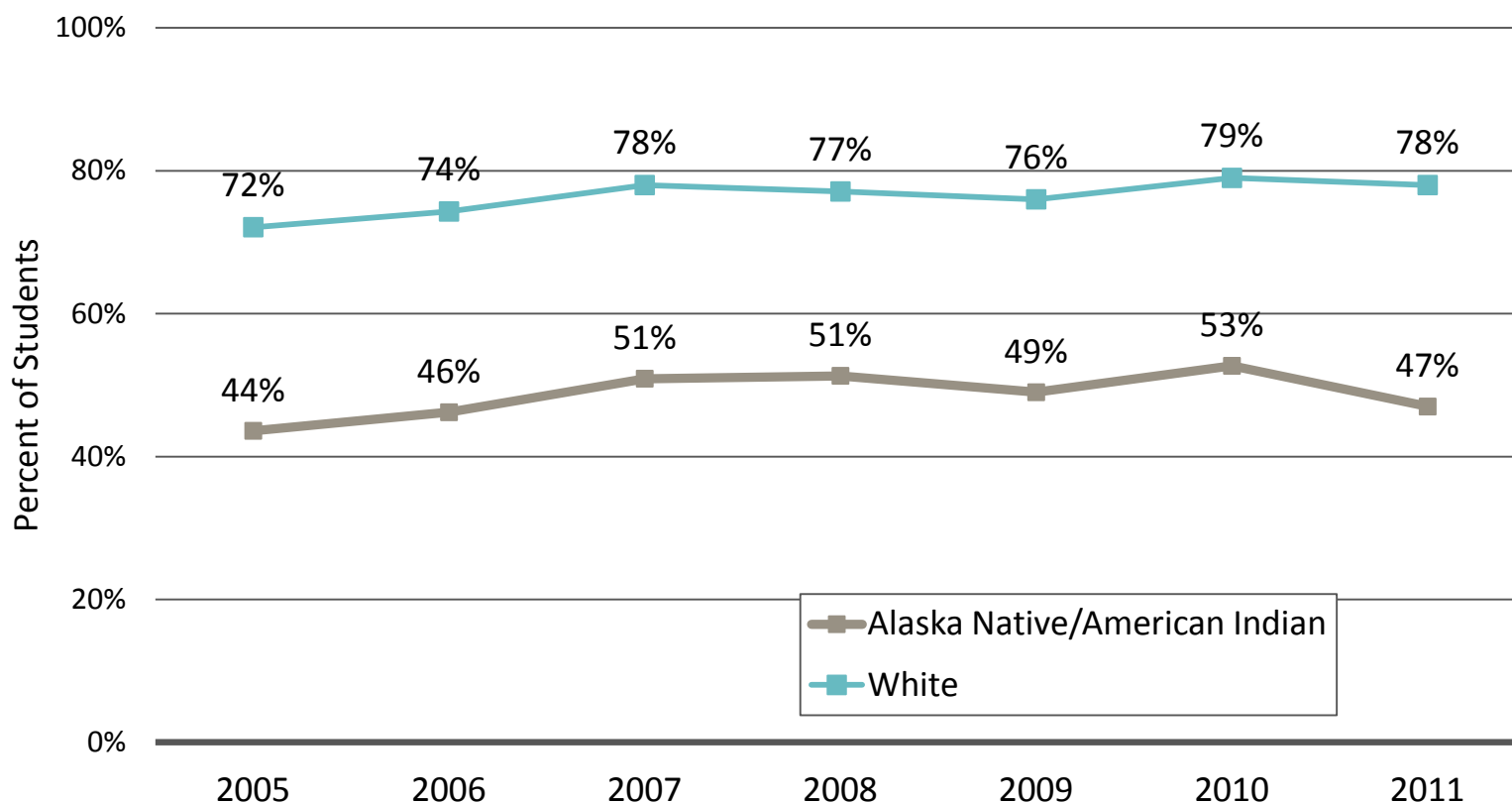
## Alaska SBA - Grade 4 Reading



Source: Alaska Department of Education and Early Development

# Persistently Large Gaps Between Groups of Students

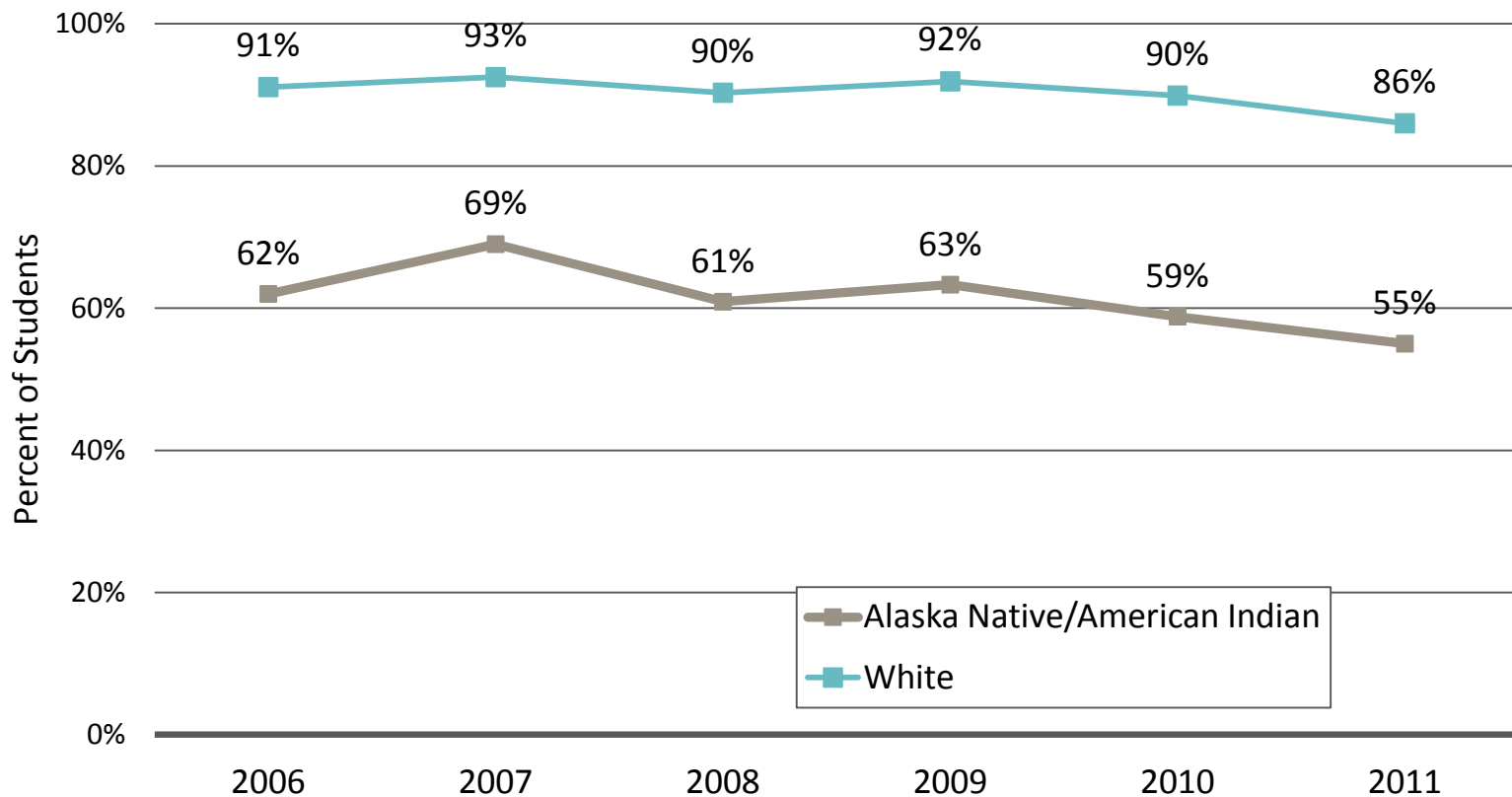
## Alaska SBA - Grade 8 Math



Source: Alaska Department of Education and Early Development

# Falling Performance Among Both Whites and Alaska Native Students

## Alaska SBA - Grade 10 Reading

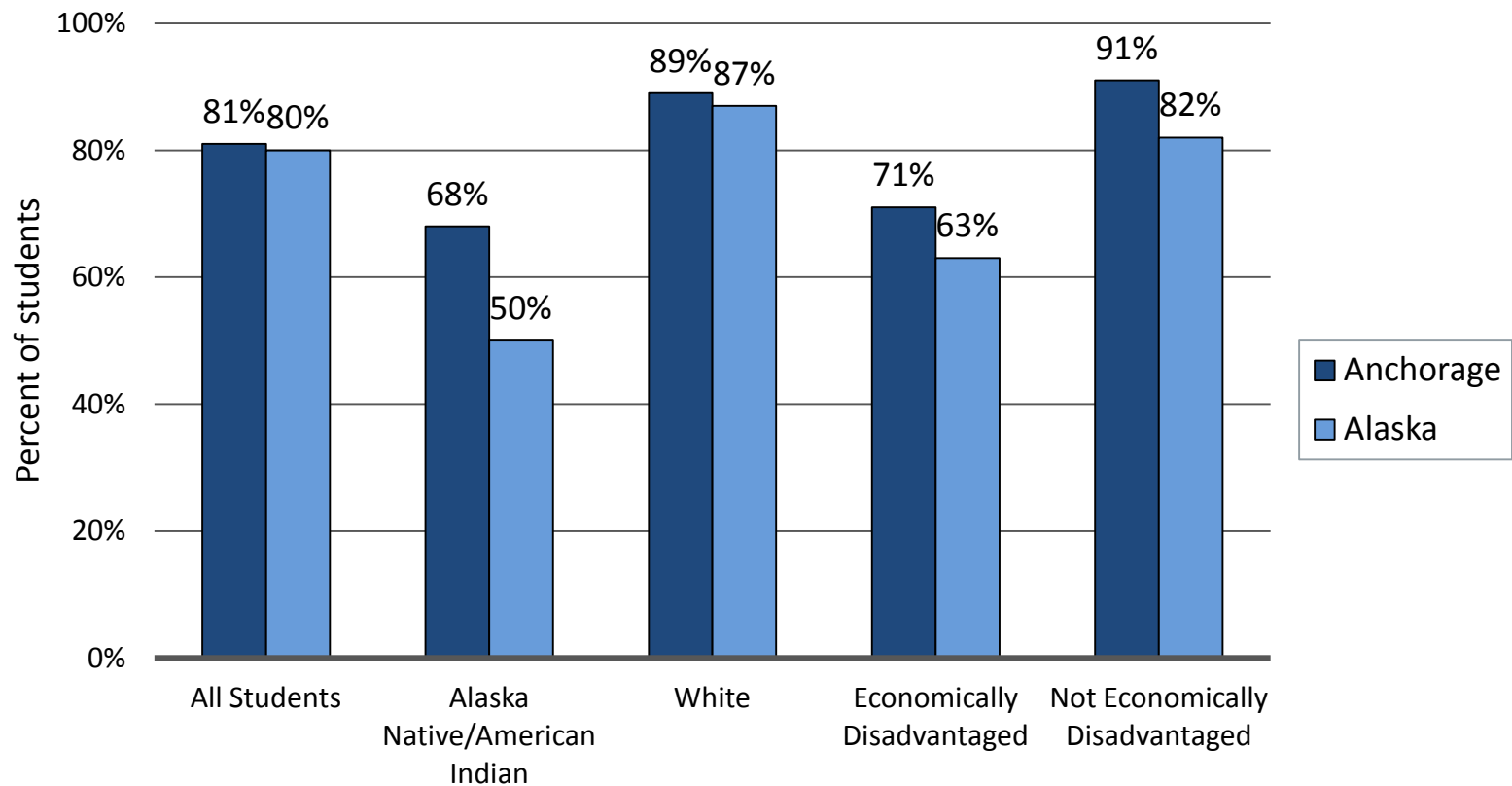


Source: Alaska Department of Education and Early Development

# Anchorage?

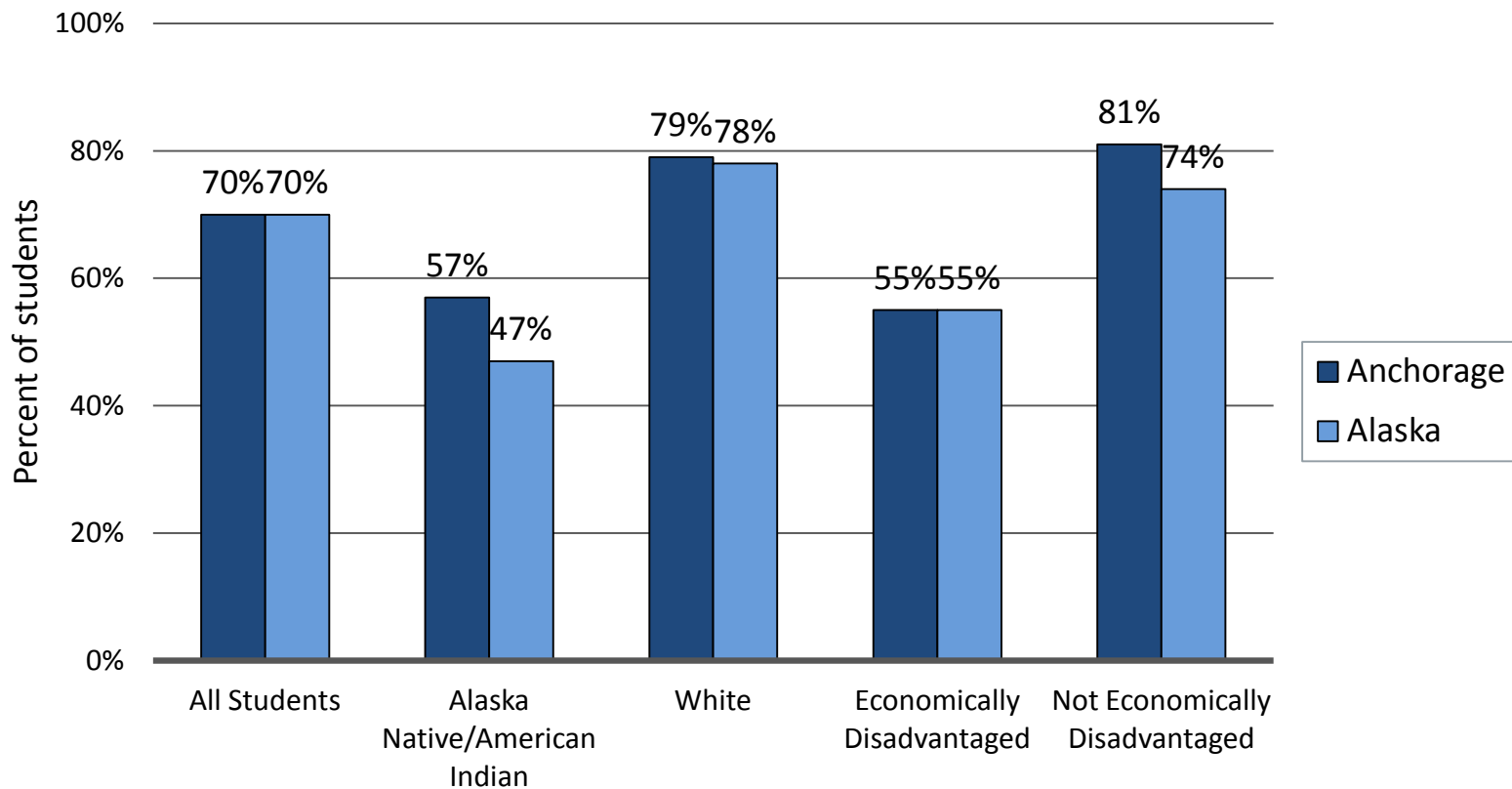
# Fourth Graders in Anchorage Generally Outperform Students Statewide

## Grade 4 Reading (2010)



# In Math, Anchorage Students Perform Similarly to Students Statewide

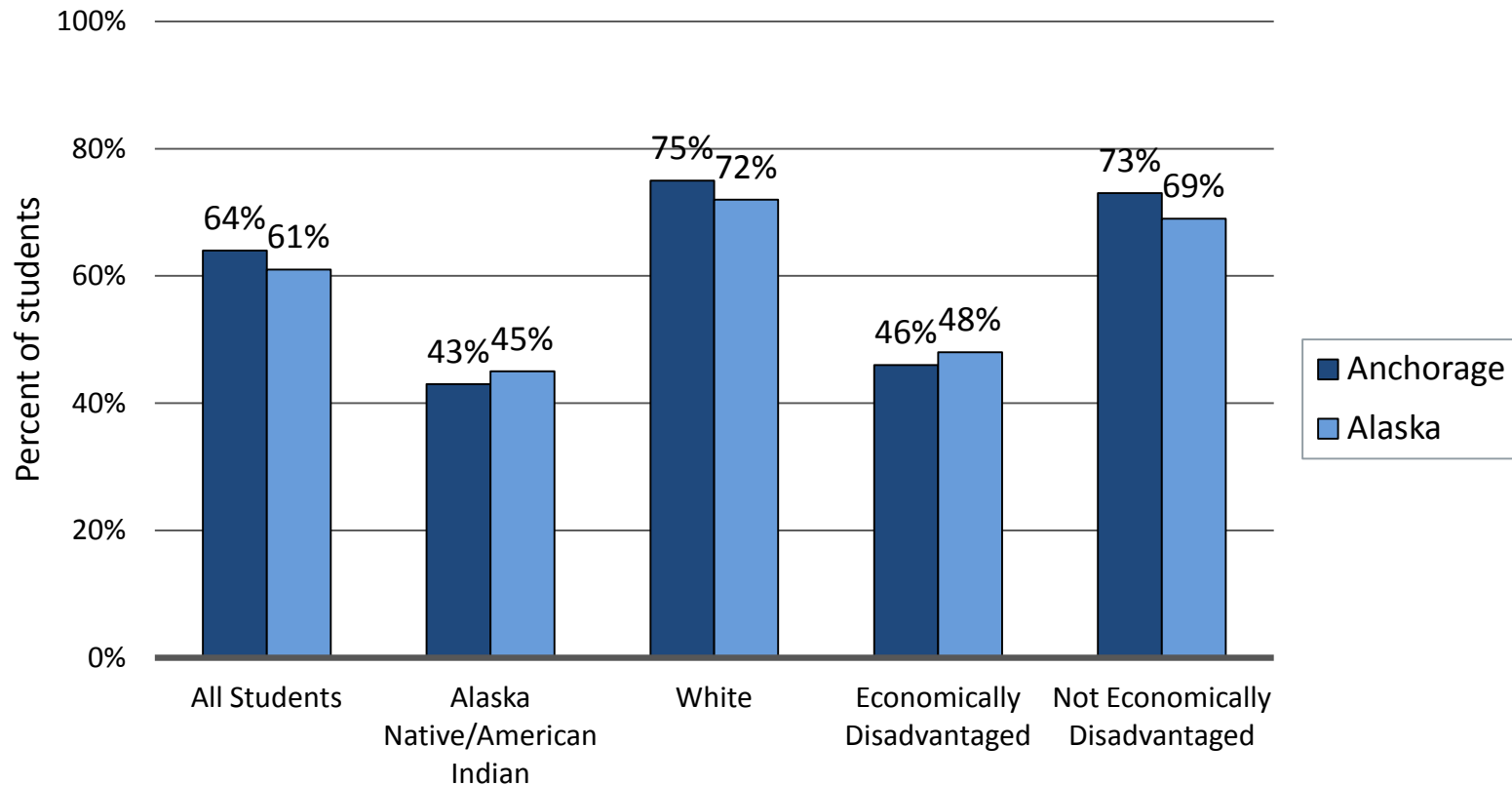
## Grade 8 Math (2010)





# Anchorage Students Generally Perform Slightly Lower than Counterparts Statewide in High School Math

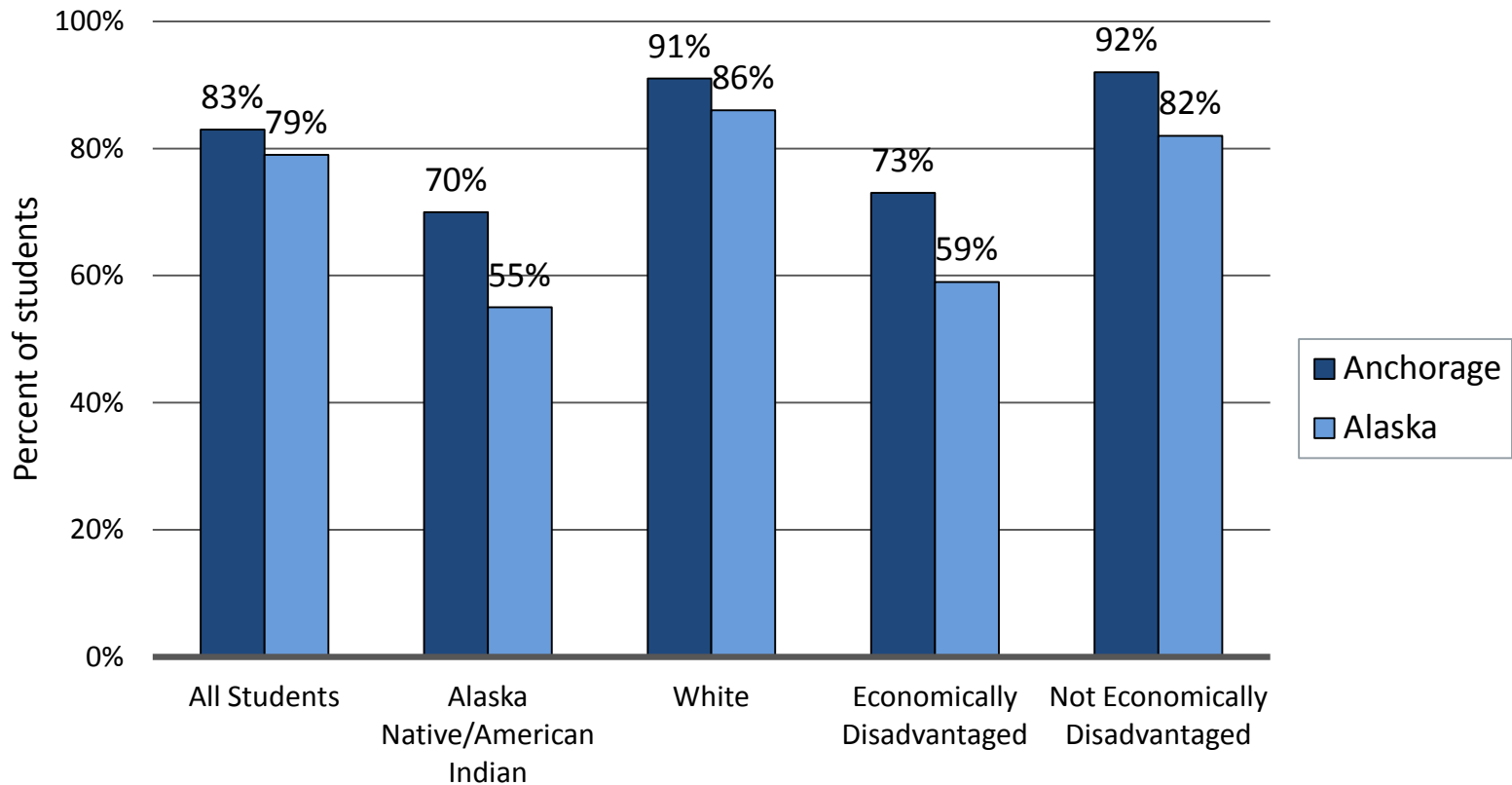
## Grade 10 Math (2010)



Source: Alaska Department of Education and Early Development

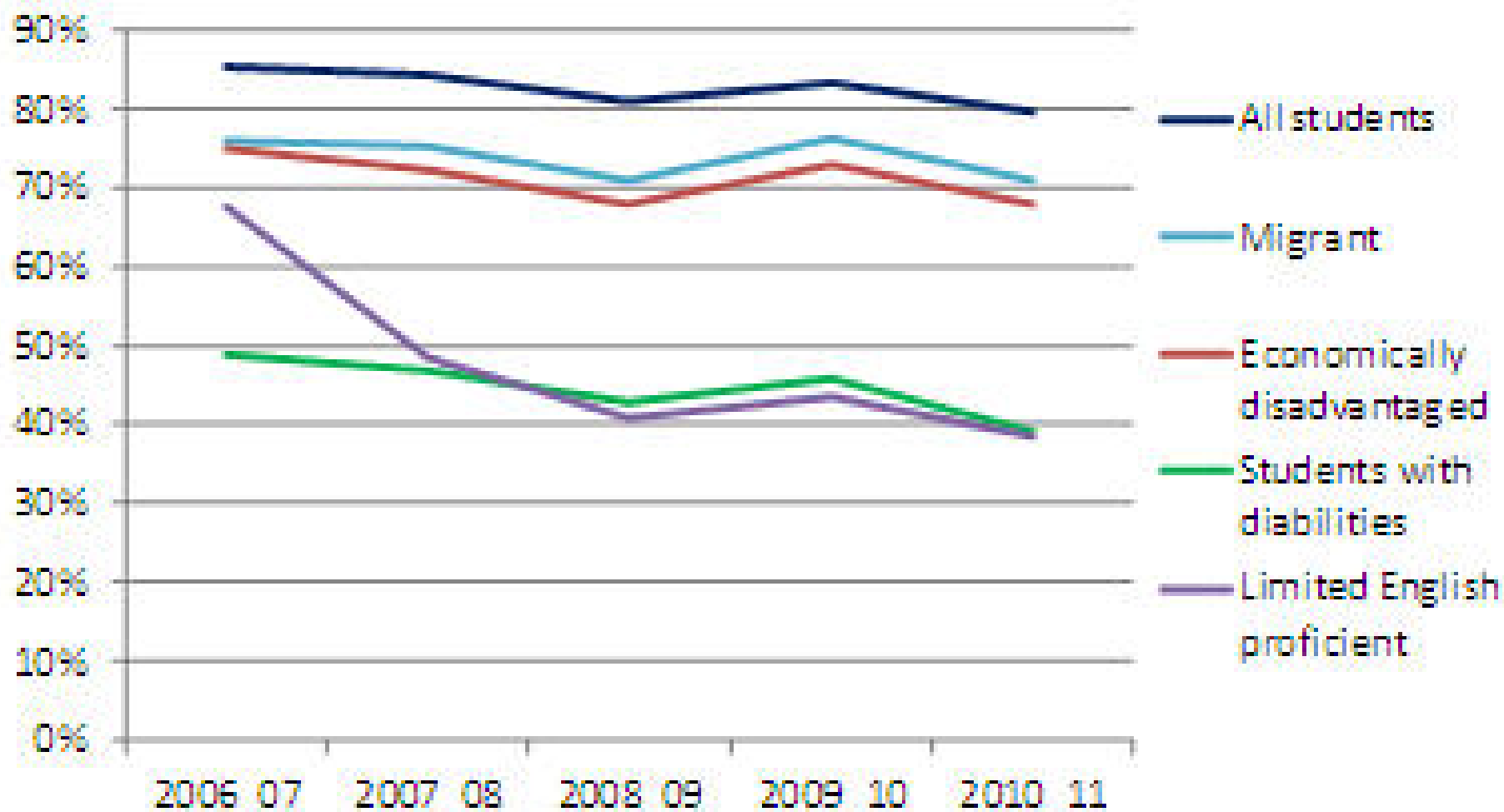
# Students in Anchorage Outperform Counterparts in High School Reading

## Grade 10 Reading (2010)



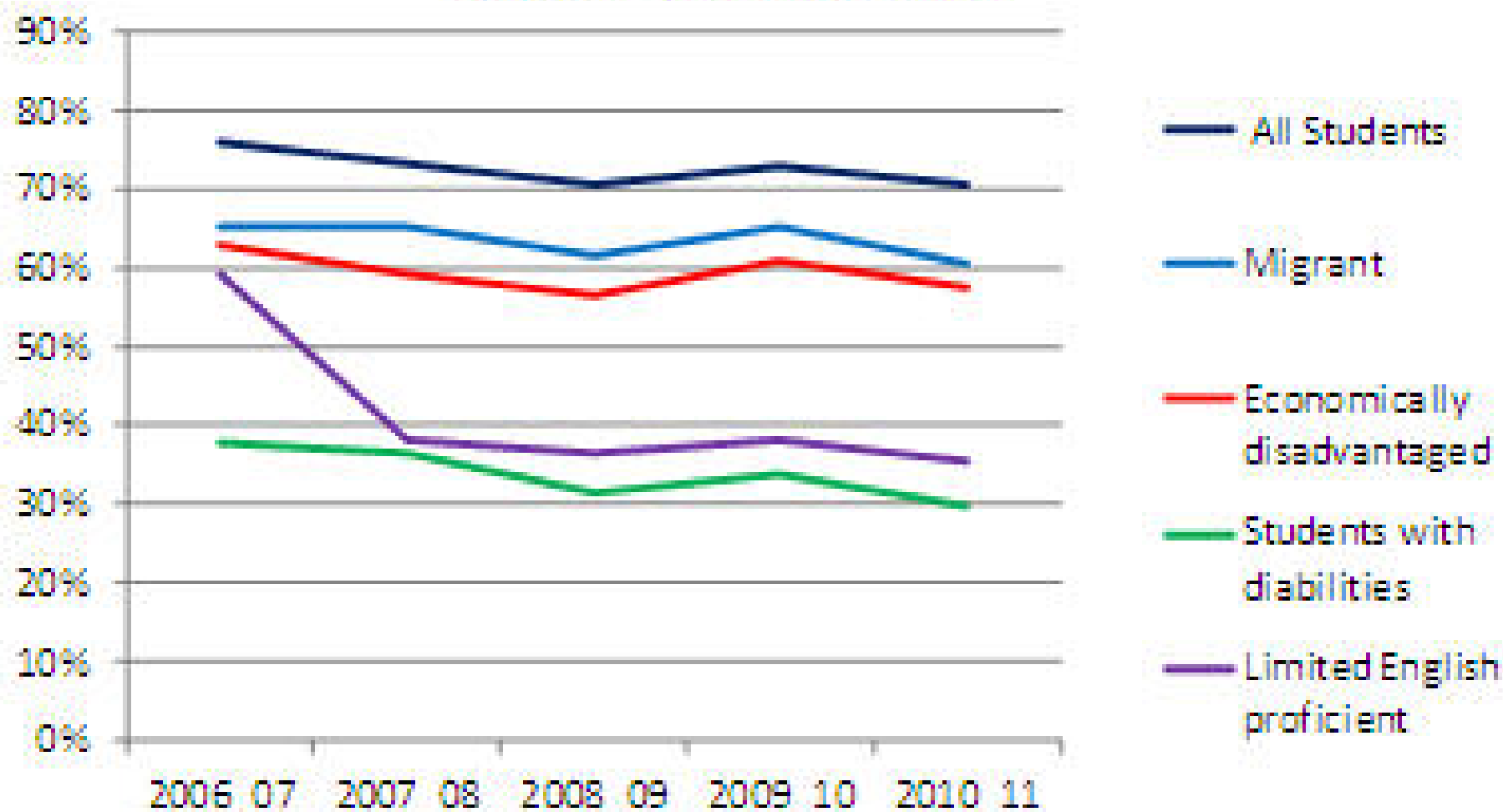
# Trends?

## Percent of ASD Students Scoring Proficient in READING SBAs by Year



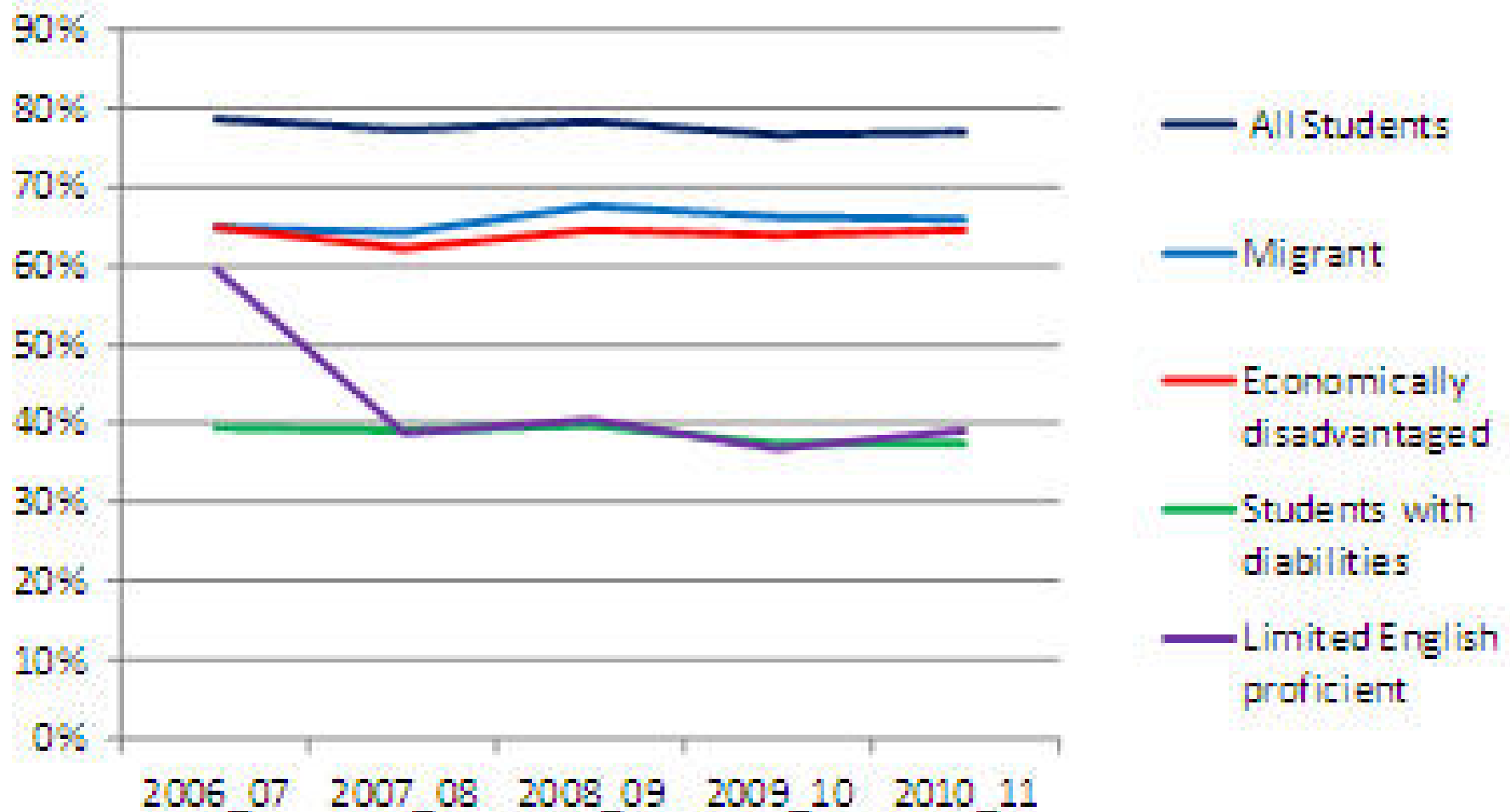
Source:

## Percent of ASD Students Scoring Proficient in MATH SBAs by Year



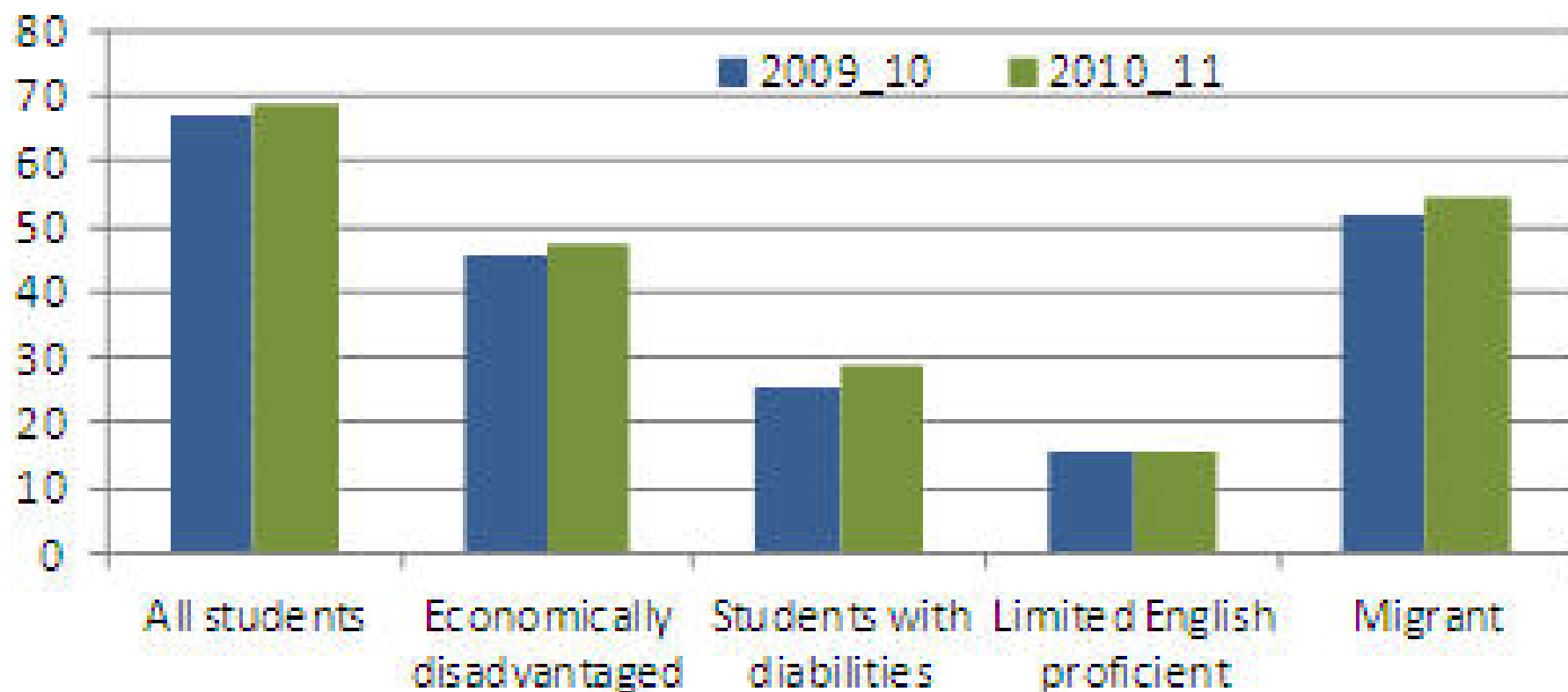
Source:

## Percent of ASD Students Scoring Proficient in WRITING SBAs by Year



Source:

## Percent of ASD 10th Graders Scoring Proficient in SCIENCE SBAs by Year



Source:

# Bottom Line

You decide.



**What can we do?**

# 1. Expect More.

- Insist state stay the course on Common Core Standards and Assessments;
- In the meantime, set stretch goals around Advanced Performance—for all groups of kids.

## 2. Don't let demographics be an excuse.

Aim high for all kids.

It's easy to blame poor  
performance on poverty, culture,  
poor parenting.

But you saw the data: poor kids,  
Alaska Native/American Indian kids  
performing better elsewhere.

# Calcedaver Elementary School

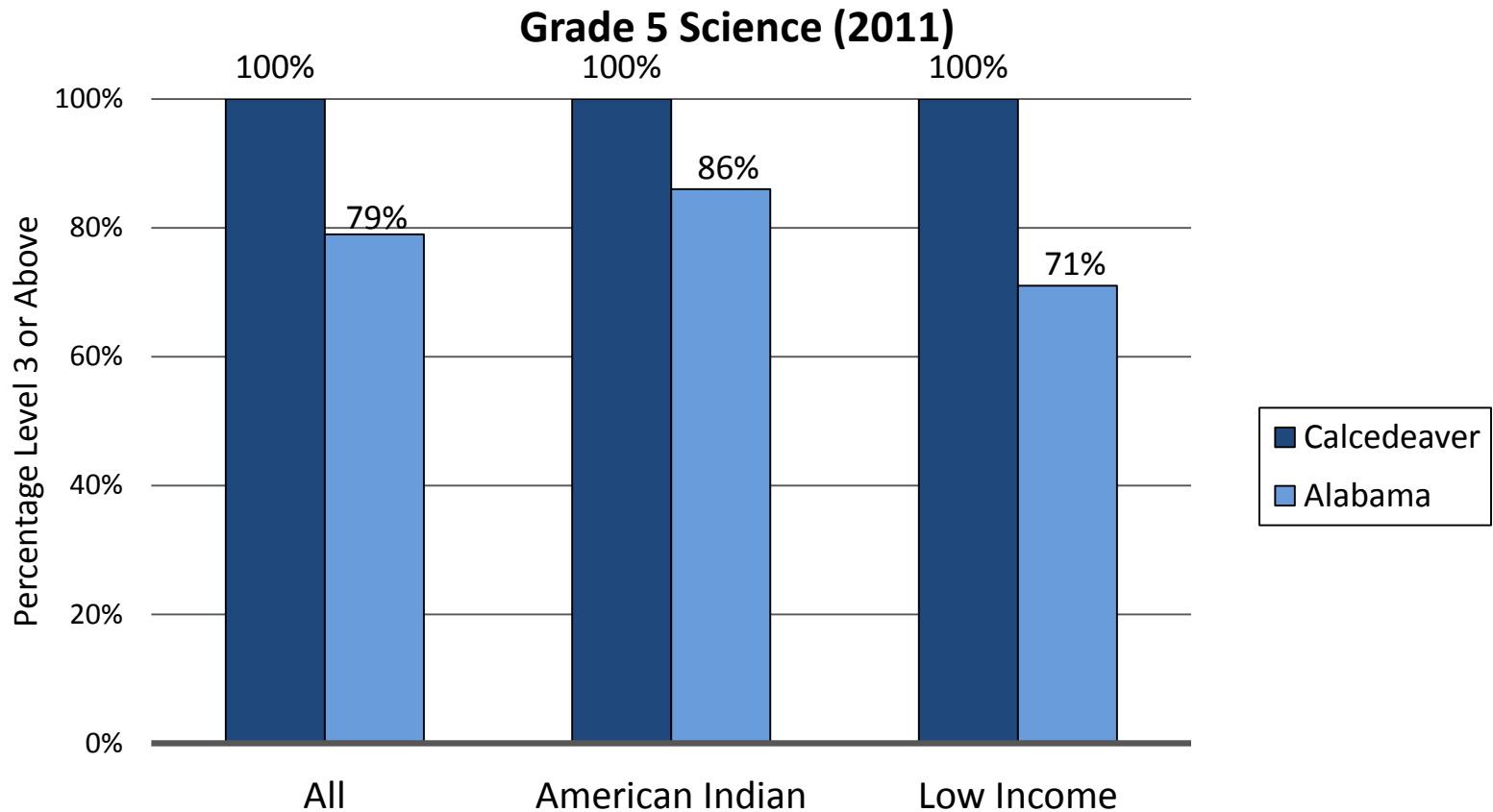
## Mount Vernon, AL

- 262 students in grades PK – 6
  - 81% American Indian
  - 16% White
- 80% Low Income
- Turn-around principal:  
Lagalylis Harbuck



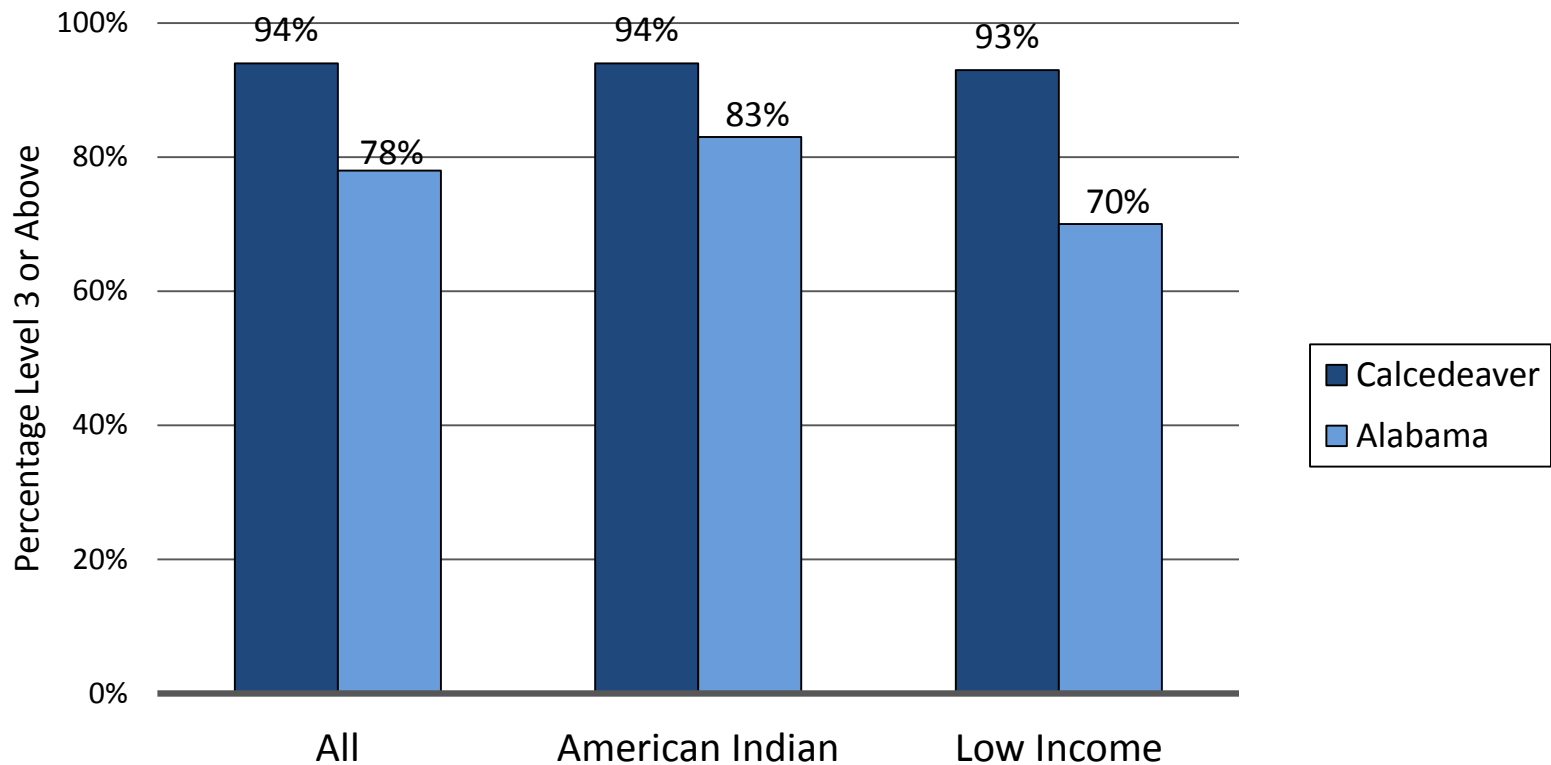
Note: Data are for 2009-10 school year  
Source: National Center for Education Statistics, Common Core of Data

# High Performance Across Groups at Calcedeaver Elementary



# High Performance Across Groups at Calcedeaver Elementary

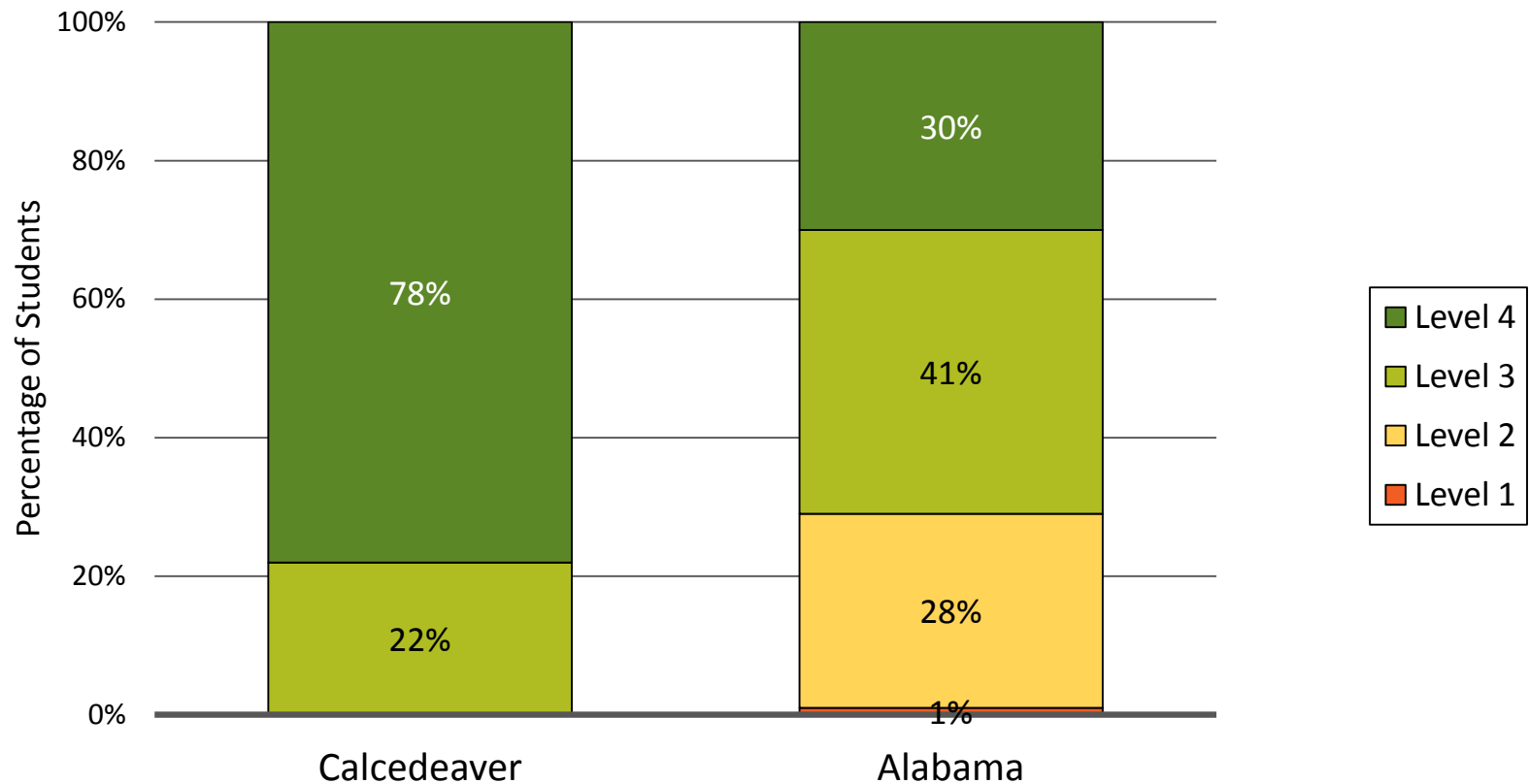
## Grade 6 Math (2011)





# Advanced Performance at Calcedeaver Elementary

Low-Income Students – Grade 5 Science (2011)



3. Make sure all kids in demanding curriculum.

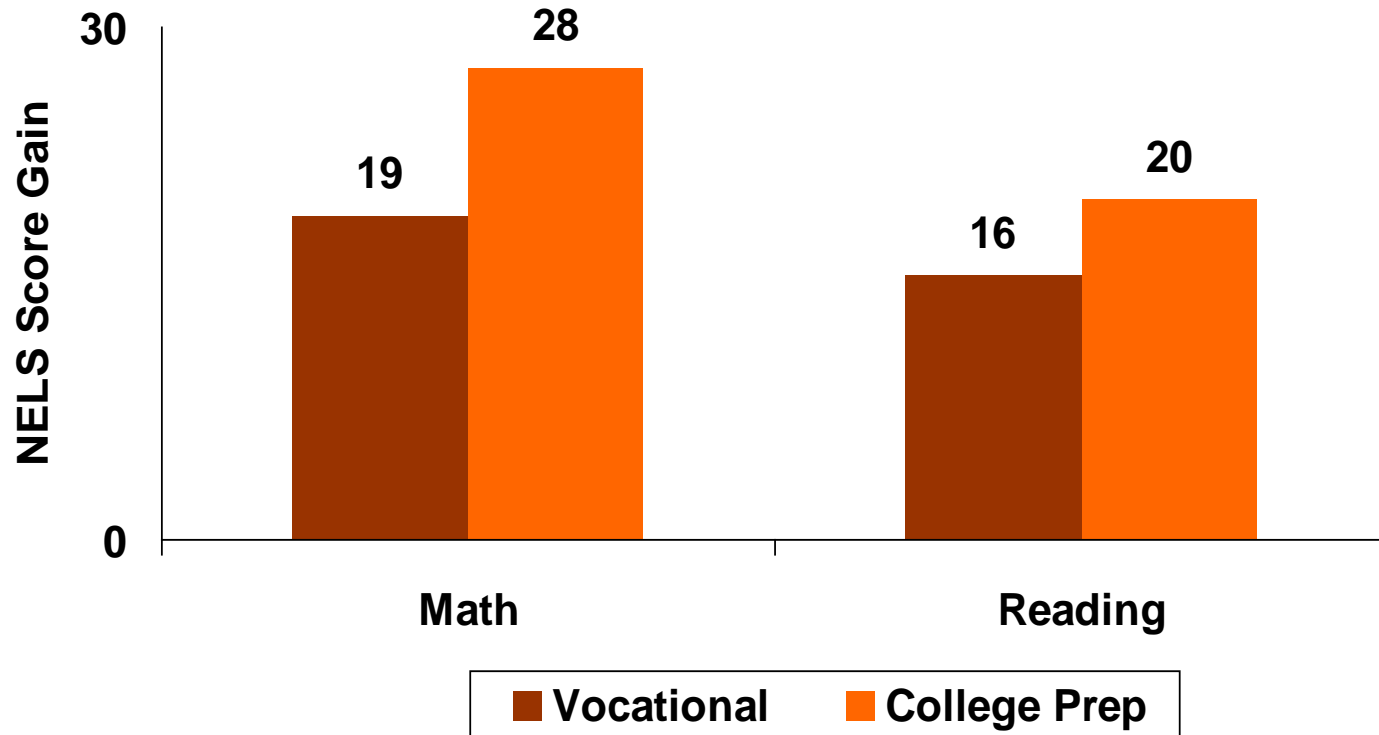
Single biggest predictor post-high school success is  
QUALITY AND INTENSITY OF HIGH SCHOOL  
CURRICULUM

Cliff Adelman, *Answers in the Tool Box*, U.S. Department of Education.

College prep curriculum has  
benefits far beyond college.

Students of all sorts will learn  
more...

# Low Quartile Students Gain More From College Prep Courses\*



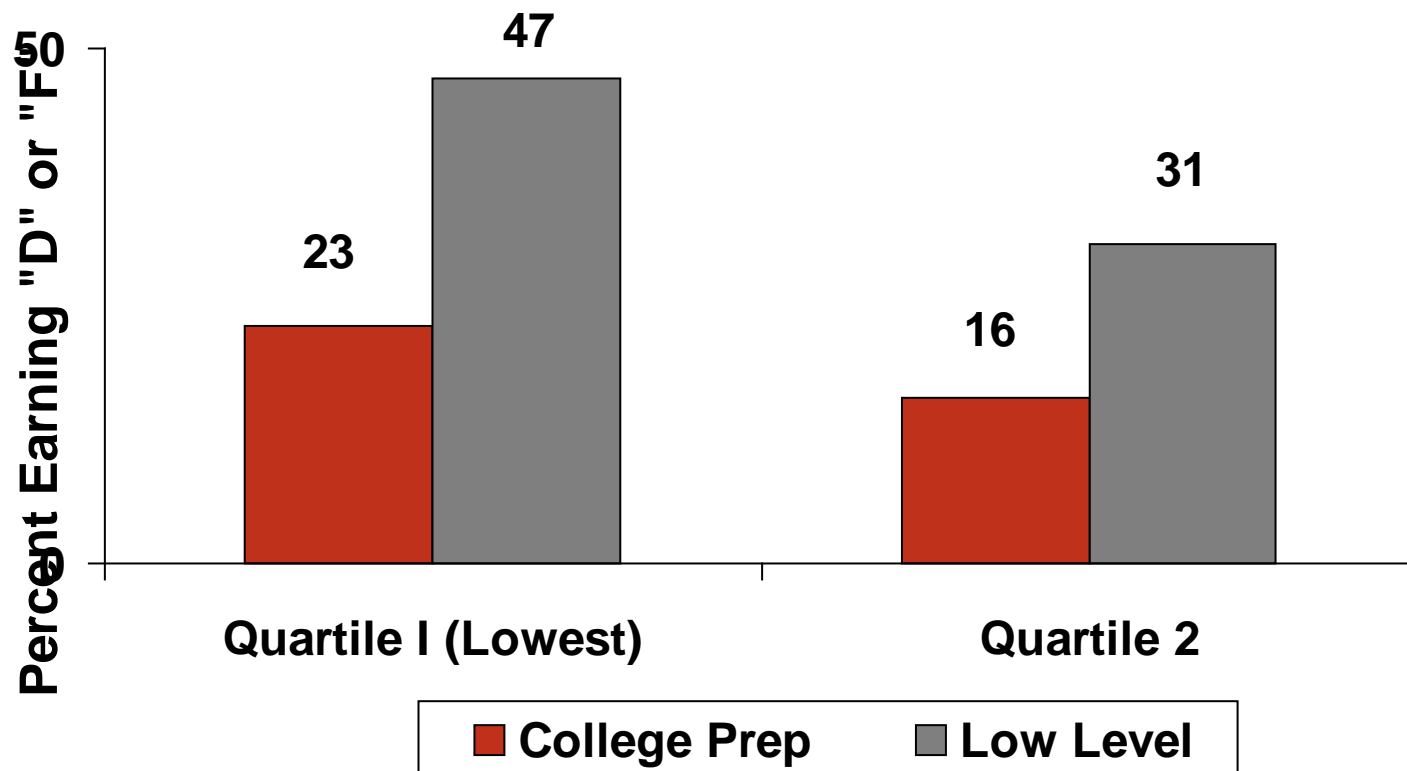
**\*Grade 8-grade 12 test score gains based on 8th grade achievement.**

**Source:** USDOE, NCES, *Vocational Education in the United States: Toward the Year 2000, in Issue Brief: Students Who Prepare for College and Vocation*

They will also fail less often...

## Challenging Curriculum Results in Lower Failure Rates, Even for Lowest Achievers

### Ninth-grade English performance, by high/low level course, and eighth-grade reading achievement quartiles



Source: SREB, "Middle Grades to High School: Mending a Weak Link". Unpublished Draft, 2002.



And they'll be better prepared  
for the workplace.

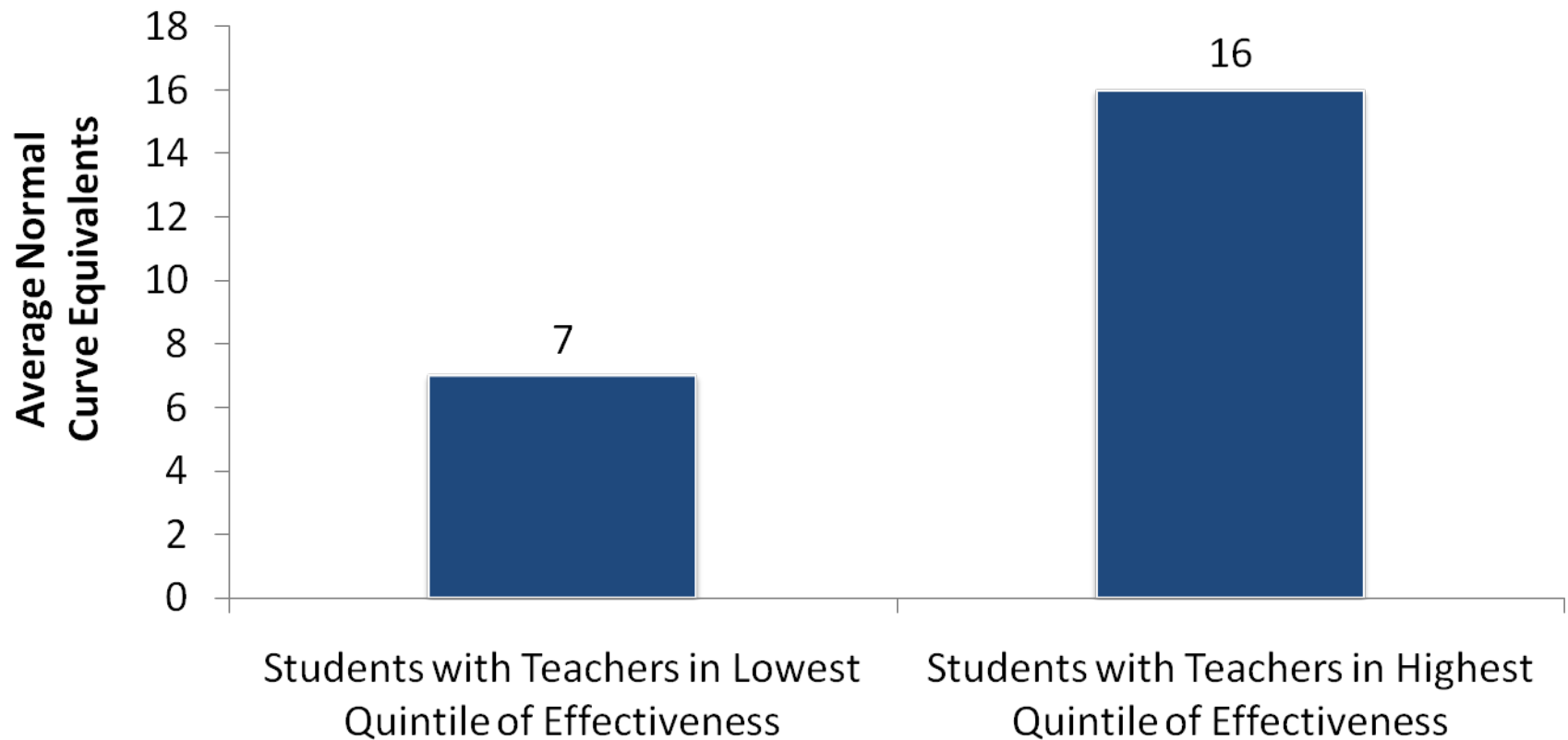
Leading states, districts making  
college prep the default  
curriculum.

Texas, Indiana, Arkansas, Michigan,  
Oklahoma, Kentucky, Kansas.

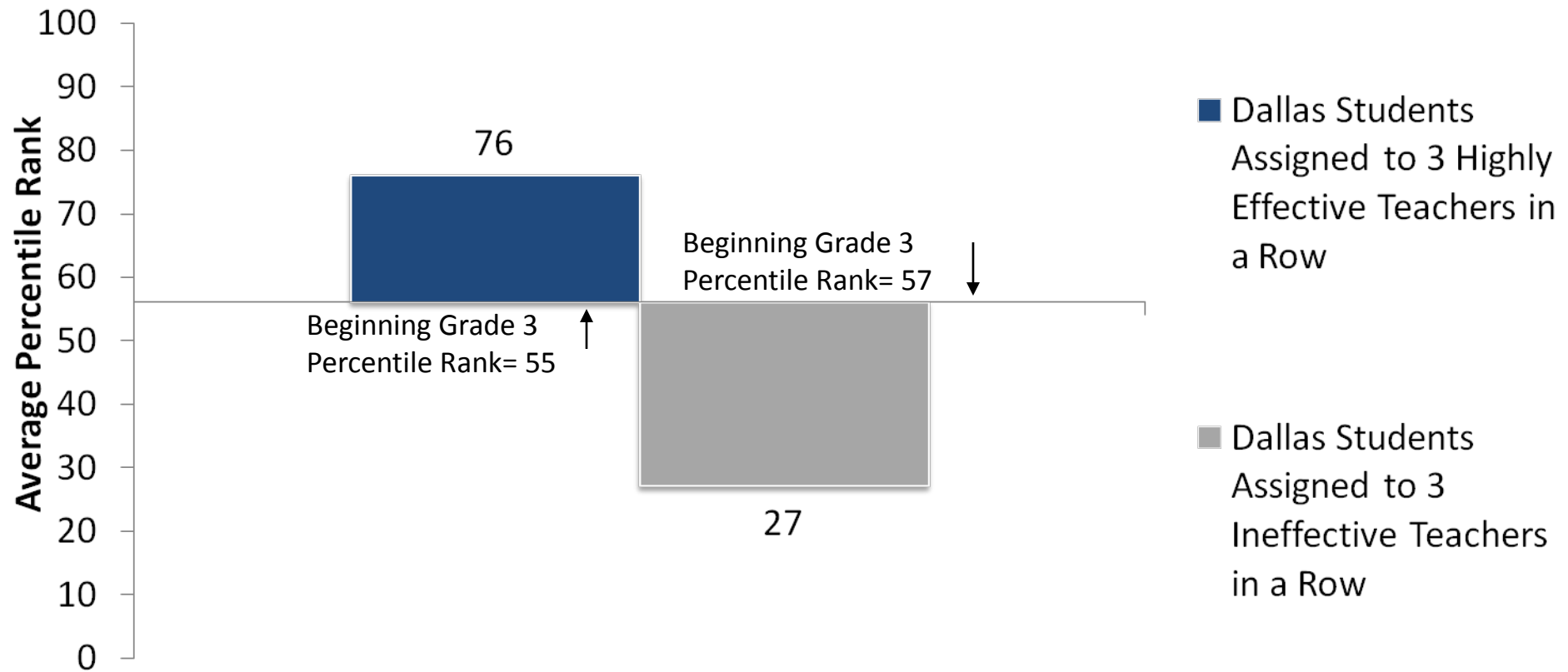
## 4. Teachers, principals matter a lot.

And there are big differences among them.

# Students in Dallas Gain More in Math with Effective Teachers: One Year Growth From 3<sup>rd</sup>-4<sup>th</sup> Grade



# Cumulative Teacher Effects On Students' Math Scores in Dallas (Grades 3-5)



So, there are VERY BIG  
differences among our teachers.

BUT...

We pretend that there aren't.

# The Widget Effect

“When it comes to measuring instructional performance, **current policies and systems overlook significant differences between teachers. There is little or no differentiation of excellent teaching** from good, good from fair, or fair from poor. This is the **Widget Effect: a tendency to treat all teachers as roughly interchangeable**, even when their teaching is quite variable. Consequently, teachers are **not developed as professionals with individual strengths and capabilities**, and **poor performance is rarely identified or addressed.**”

- *The New Teacher Project, 2009*





In districts that use a two-rating teacher performance evaluation system—most commonly “satisfactory” or “unsatisfactory”—the “unsatisfactory” rating is rarely used.

Site	<b>S</b> Number of Satisfactory Evaluation Ratings SY03-04 - SY07-08 <sup>1</sup>	<b>U</b> Number of Unsatisfactory Evaluation Ratings SY03-04 - SY07-08 <sup>2</sup>
Denver <sup>3</sup>	2,676	22 (0.8%)
Jonesboro <sup>4</sup>	246	0 (0%)
Pueblo <sup>5</sup>	1,284	2 (0.2%)
Toledo <sup>6</sup>	1,768	3 (0.2%)

All data for tenured/non-probationary teachers.

<sup>1</sup> Source: District extant data supplied between April 2008 and March 2009

<sup>2</sup> Source: District extant data supplied between April 2008 and March 2009

<sup>3</sup> Number evaluation ratings assigned between SY 2003-04 to SY 2007-08

<sup>4</sup> Number of evaluation ratings assigned between SY 2003-04 to SY 2005-06

<sup>5</sup> Number of evaluation ratings assigned between SY 2005-06 to SY 2007-08

<sup>6</sup> Number of evaluation ratings assigned between SY 2005-06 to SY 2007-08



Districts that use multiple evaluation ratings—three or more ratings—regularly award teachers the highest evaluation ratings.

Estimated percent of tenured/non-probationary teachers who received one of the top two highest performance evaluation ratings for evaluations conducted in SY 2007-08.

99%

Cincinnati  
(Based on a 4-Rating Scale)

98%

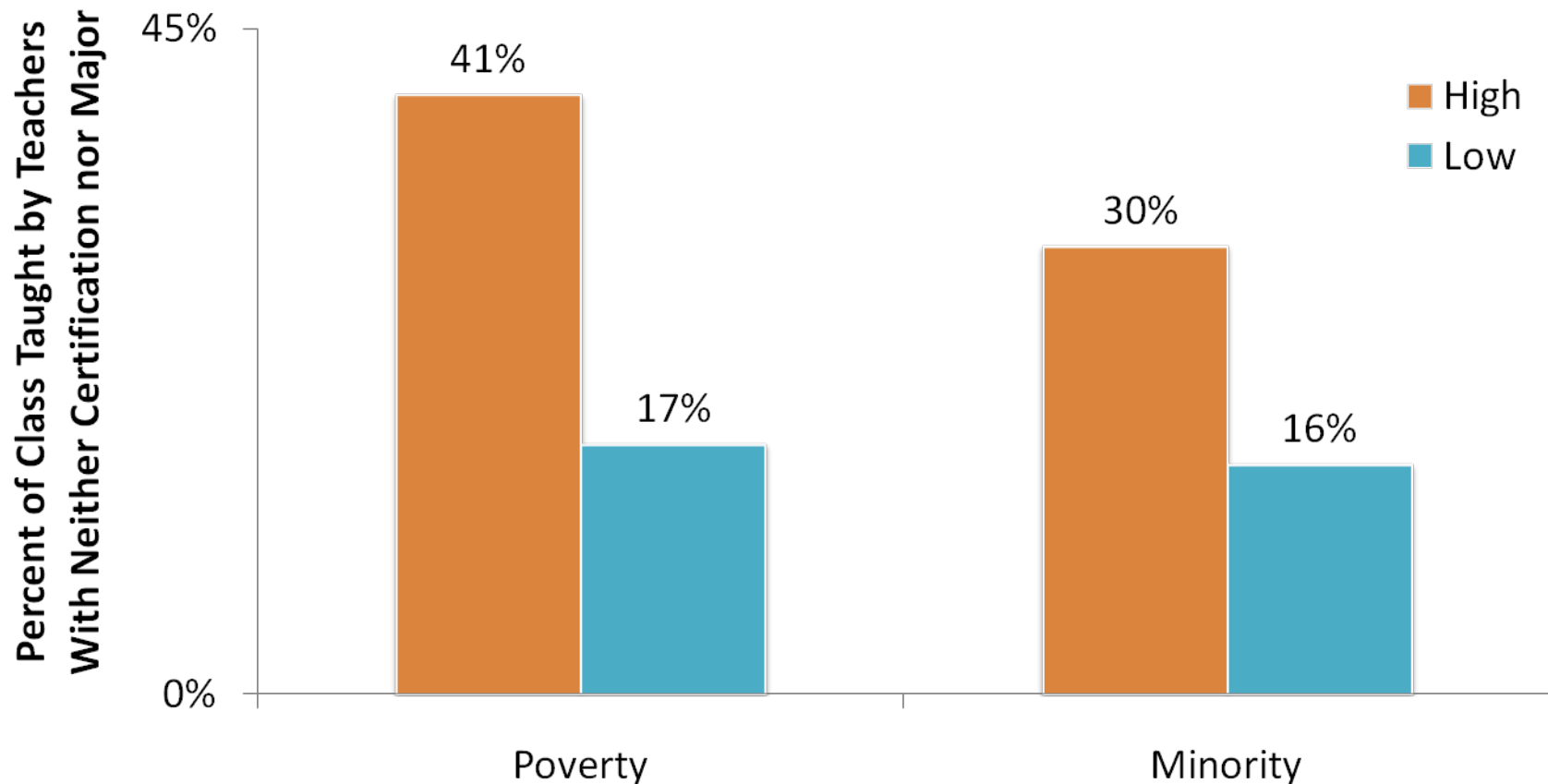
Rockford  
(Based on a 3-Rating Scale)

Source: District evaluation data supplied by Cincinnati Public Schools and Rockford Public Schools human resources departments from October 2008 to March 2009.

So, we paper over the differences  
among our teachers AND...we  
continue to assign our weakest to  
the kids who need the strongest.



# Math Classes at High-Poverty and High- Minority Schools More Likely to be Taught by Out of Field\* Teachers

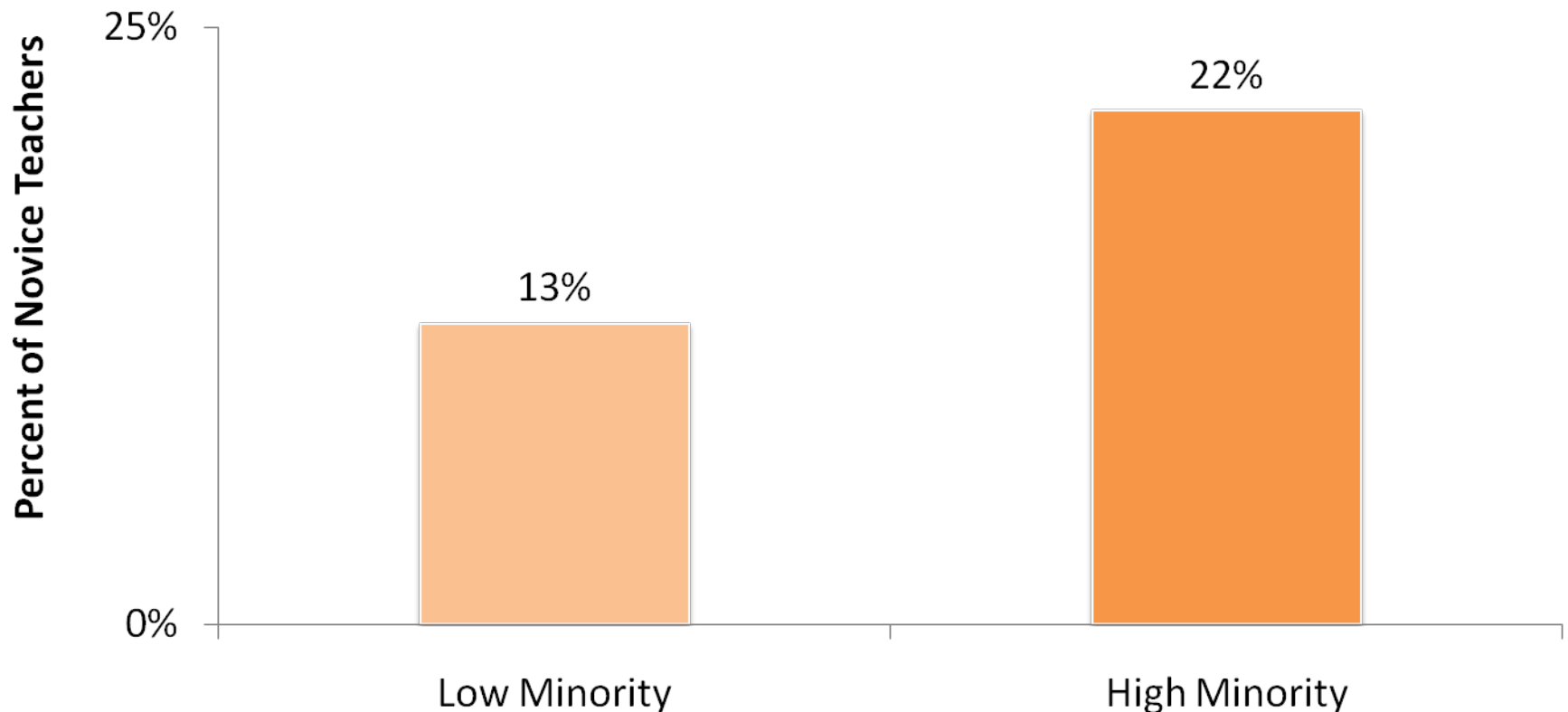


Note: High Poverty school-75% or more of the students are eligible for free/reduced price lunch. Low-poverty school -15% or fewer of the students are eligible for free/reduced price lunch. High minority school-75% or more of the students are Black, Hispanic, American Indian or Alaskan Native, Asian or Pacific Islander. Low-minority school -10% or fewer of the students are non-White students.

**\*Teachers with neither certification nor major. Data for secondary-level core academic classes (Math, Science, Social Studies, English) across USA.**  
**Source:** Analysis of 2003-2004 Schools and Staffing Survey data by Richard Ingersoll, University of Pennsylvania 2007. © 2011 THE EDUCATION TRUST



# Students at High-Minority Schools More Likely to Be Taught By Novice\* Teachers

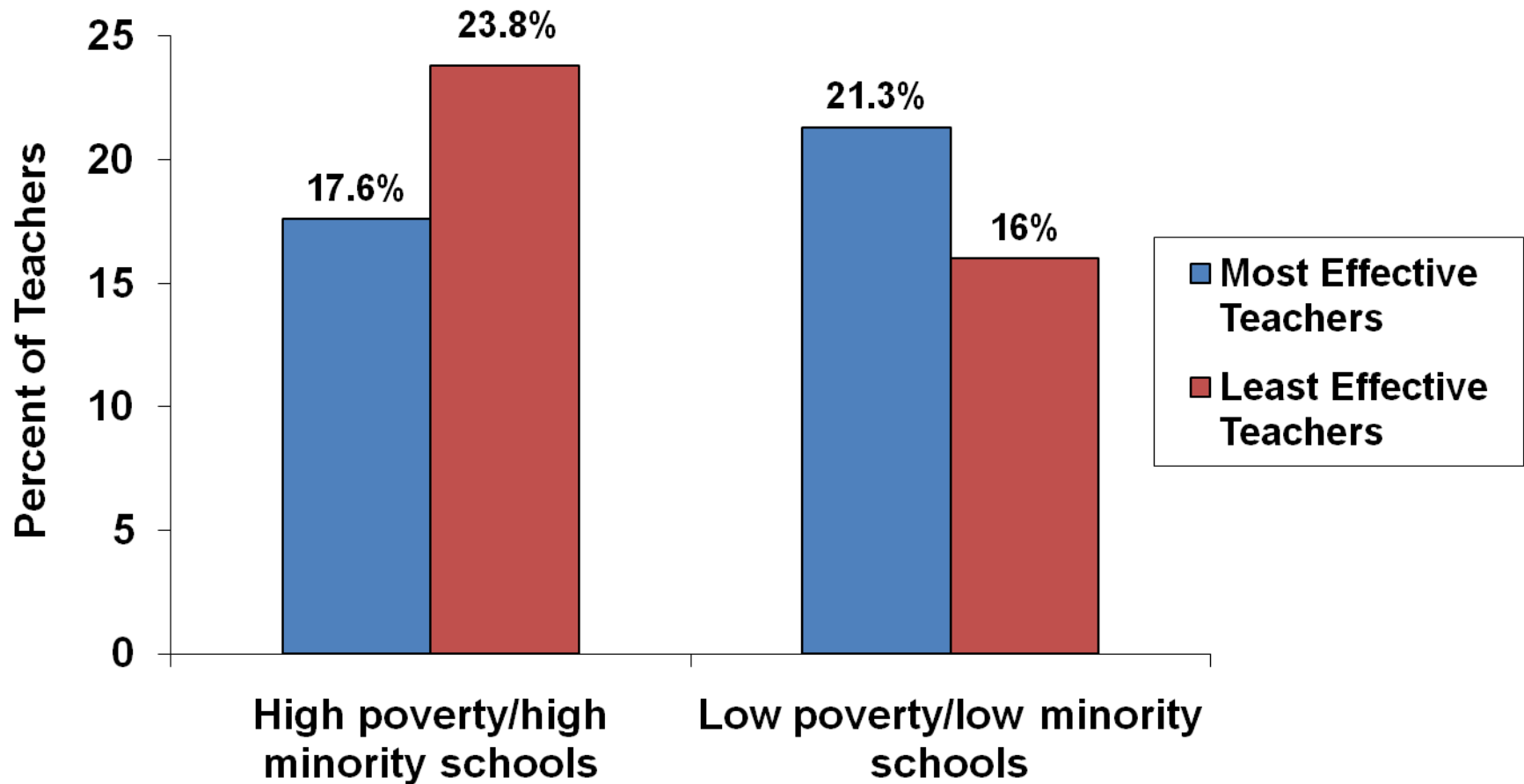


Note: High minority school-75% or more of the students are Black, Hispanic, American Indian or Alaskan Native, Asian or Pacific Islander.  
Low-minority school -10% or fewer of the students are non-White students.

\*Novice teachers are those with three years or fewer experience.

Source: Analysis of 2003-2004 Schools and Staffing Survey data by Richard Ingersoll, University of Pennsylvania 2007. © 2011 THE EDUCATION TRUST

# Tennessee: High poverty/high minority schools have fewer of the “most effective” teachers and more “least effective” teachers

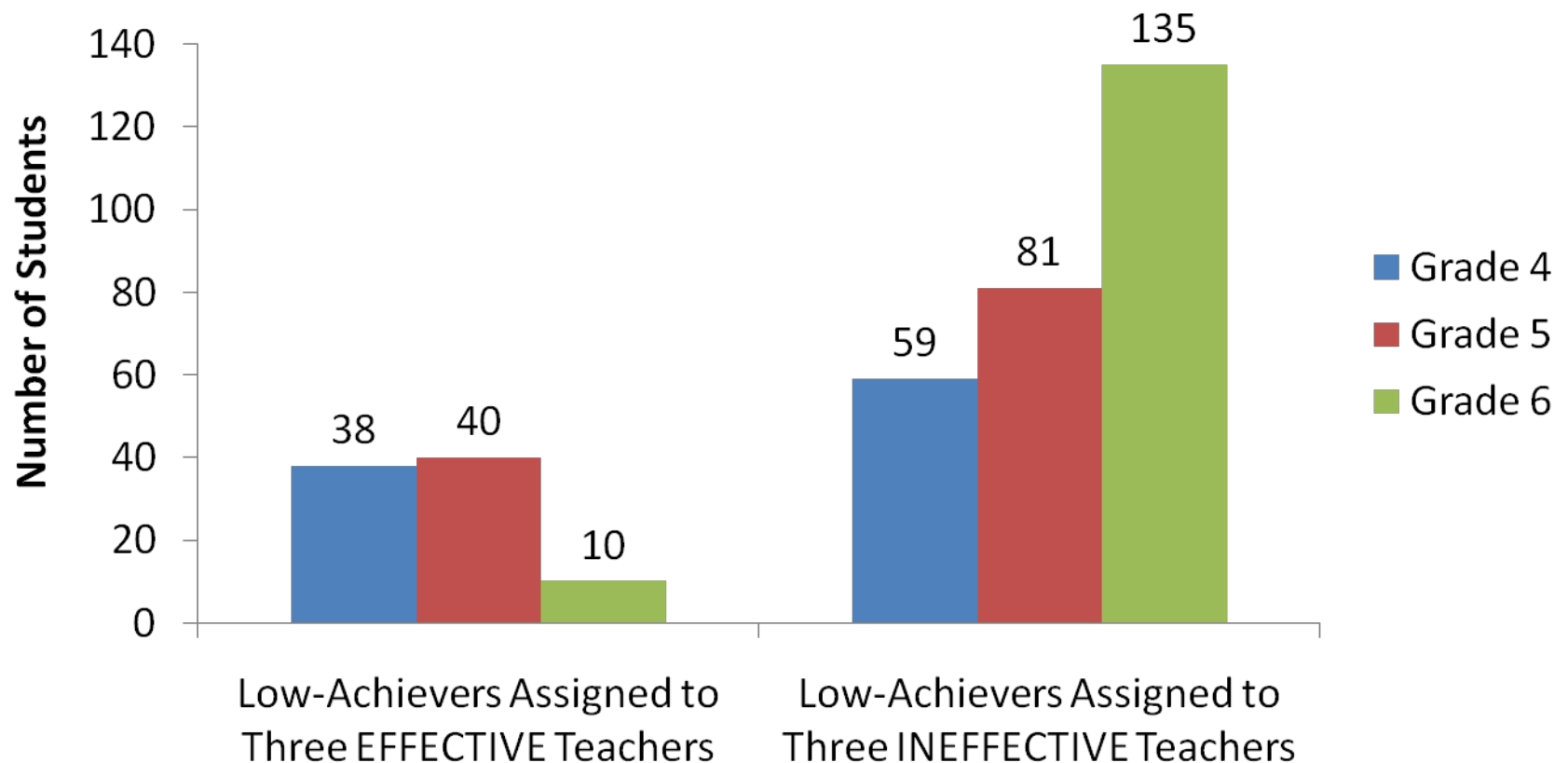


**Note:** High Poverty/High minority means at least 75% qualify for FRPL and at least 75% are minority.

**Source:** Tennessee Department of Education 2007. "Tennessee's Most Effective Teachers: Are they assigned to the schools that need them most?" [http://tennessee.gov/education/nclb/doc/TeacherEffectiveness2007\\_03.pdf](http://tennessee.gov/education/nclb/doc/TeacherEffectiveness2007_03.pdf)



# Low-Achieving Students are More Likely to be Assigned to Ineffective Teachers than Effective Teachers



# High performing schools and districts...

- Work hard to attract and hold good teachers and principals
- Make sure that their best are assigned to the students who most need them
- Chase out those who are not “good enough” for their kids.



## 5. Systems improve faster when there is a demand for change.

Important roles for parents,  
community.

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The Education Trust

Washington, D.C.  
202/293-1217

Ann Arbor, MI  
734/619-8009

Oakland, CA  
510/465-6444