

# GRAND RAPIDS CHAMBER

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Education Data Story  
Nation, State & Region

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Education & Workforce Committee  
February 14, 2023





# Sunil Joy

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Director of Research and Innovation  
Kentwood Public Schools

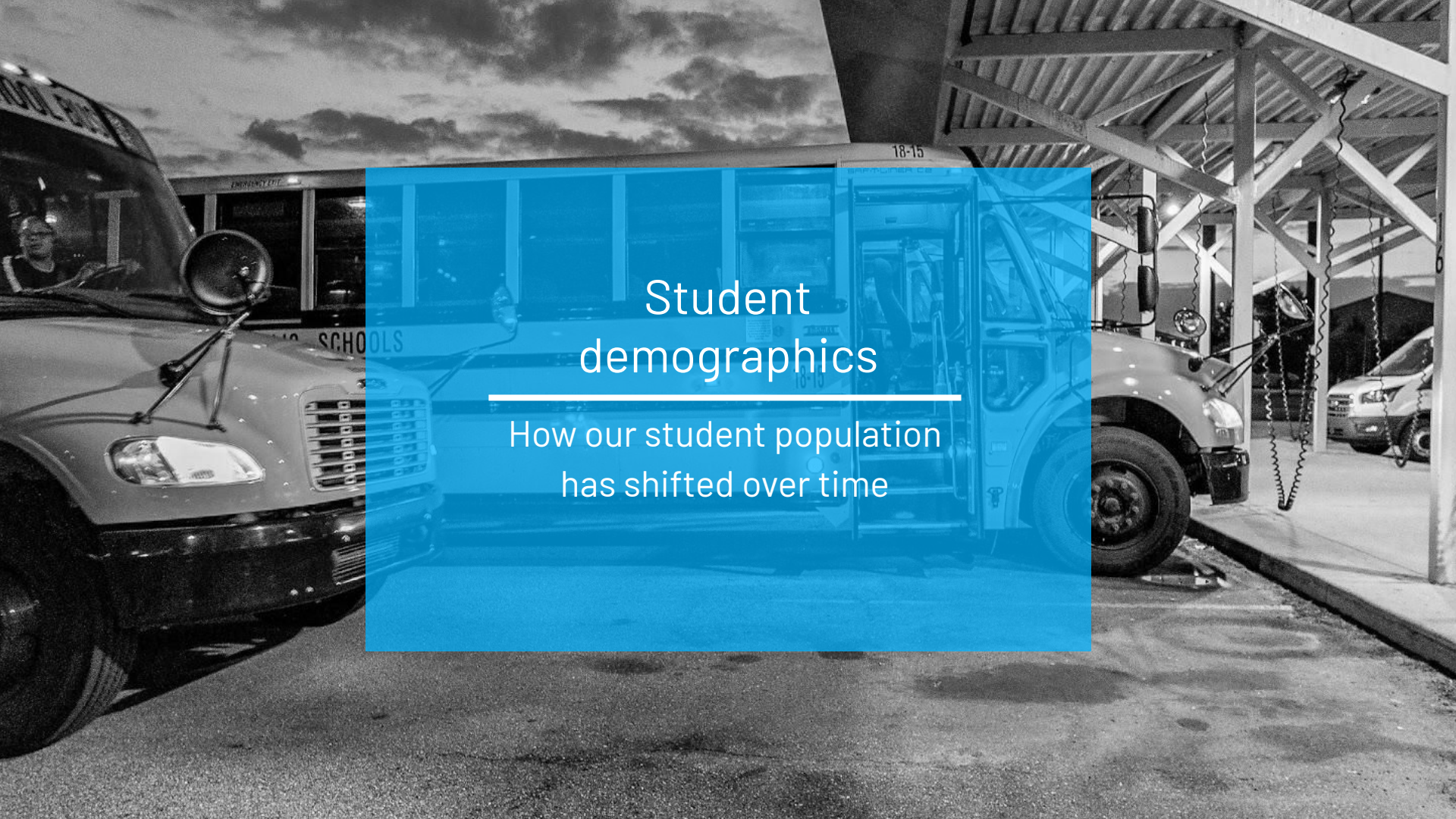




# Goals for today

- Gain a deeper understanding of educational trends across our country, state and region
- Appreciate the underlying realities facing our students, staff and schools





# Student demographics

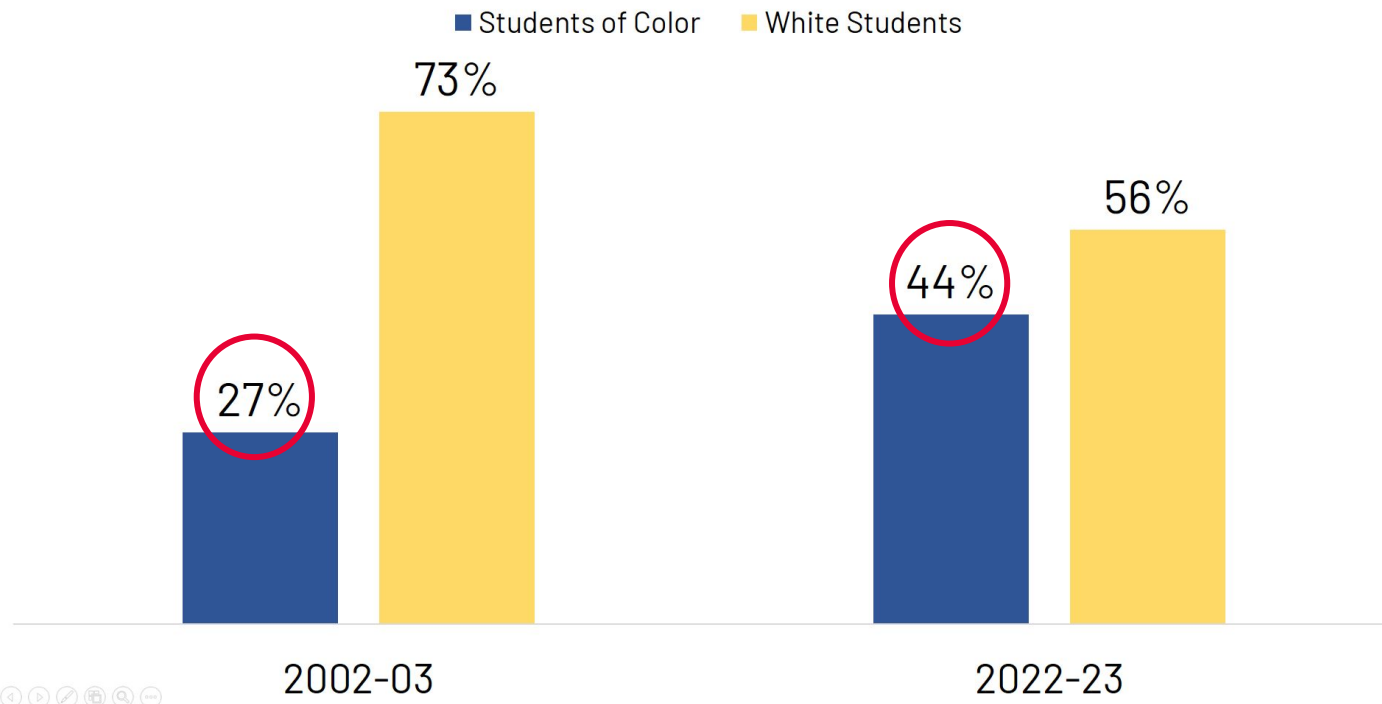
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How our student population  
has shifted over time



# Large increase in diversity within Kent ISD area schools

## Enrollment in Kent ISD Area Public Schools

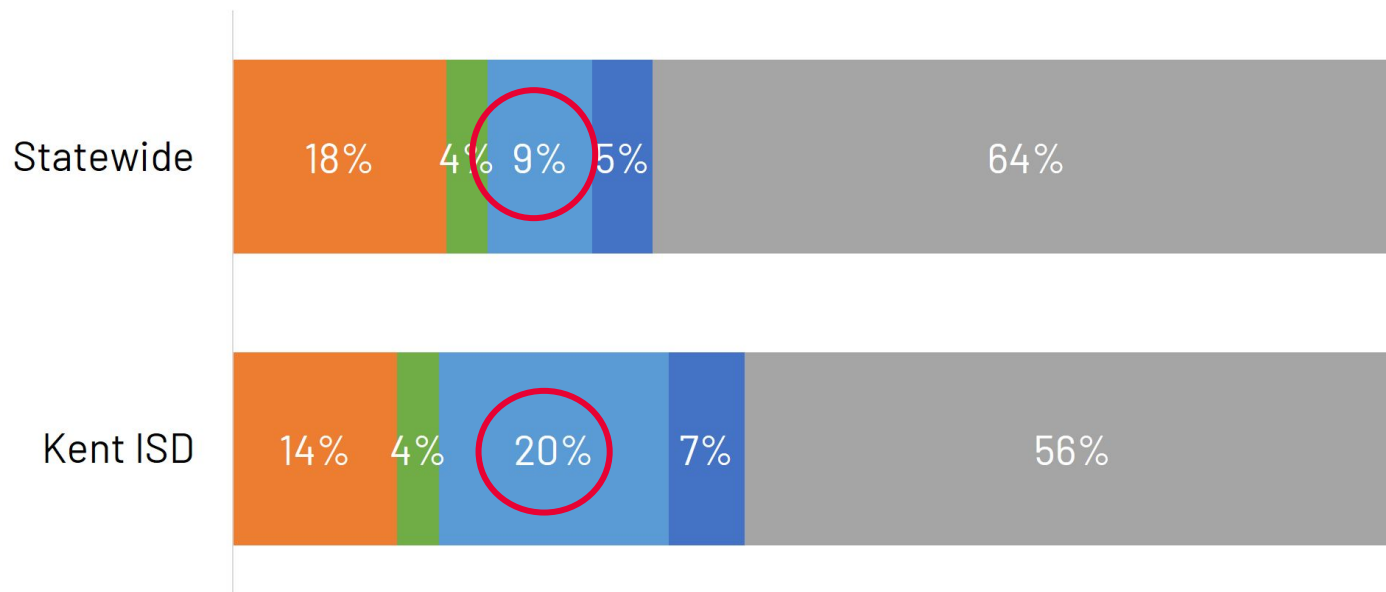




# One in five students are Hispanic in Kent ISD districts

## Enrollment in Public Schools by Race/Ethnicity – 2022-23

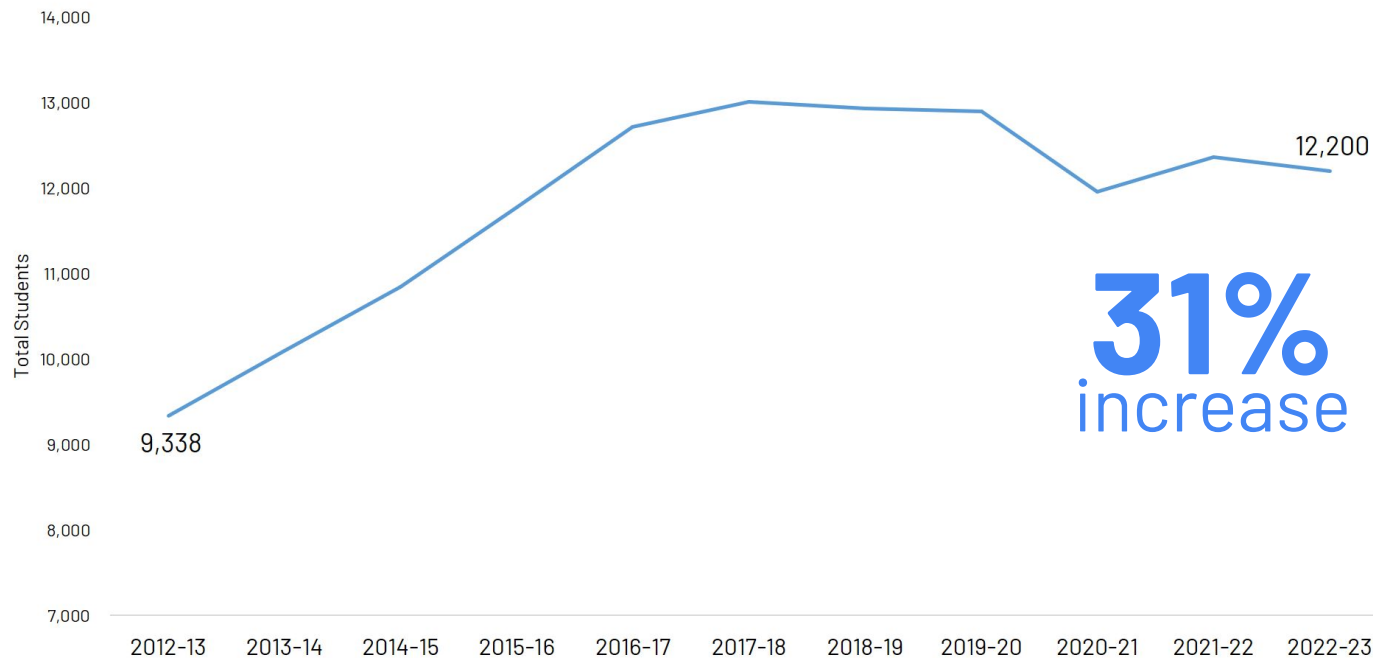
■ African American ■ Asian ■ Hispanic ■ Two or More Races ■ White





# 31 percent increase in English Learners in 10 year period

## English Learner Enrollment in Kent ISD Area Public Schools

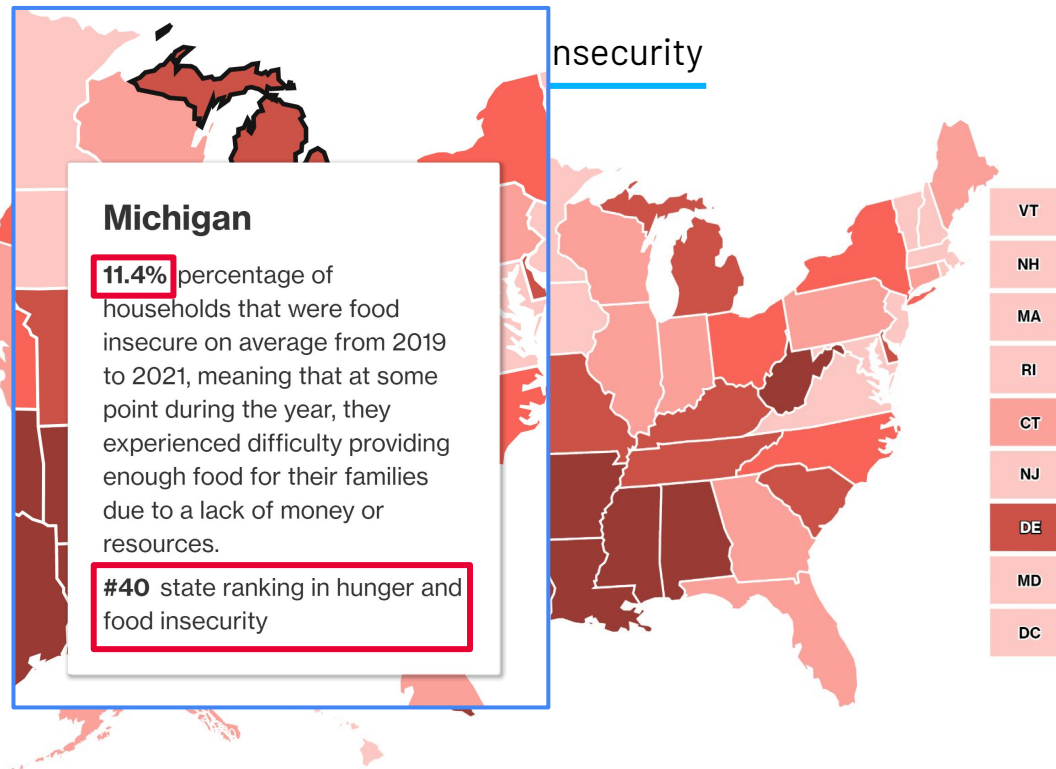
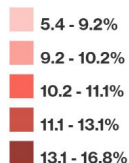




# Michigan in top 10 states for household food insecurity

Percentage of households that were food insecure on average from 2019 to 2021, meaning that at some point during the year, they experienced difficulty providing enough food for their families due to a lack of money or resources.

Explore the national data





# Academic Achievement & the Pandemic

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## The Nation's Report Card



# The Nation's Report Card

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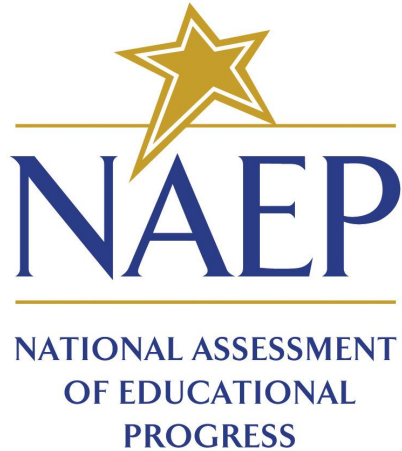


NATIONAL ASSESSMENT  
OF EDUCATIONAL  
PROGRESS

- The National Assessment of Educational Progress (NAEP) - **The Nation's Report Card** - is the largest **representative** and **continuing assessment** of student progress in the US.
- Administered by the US Department of Education, NAEP is the only **common measure** of student achievement **nationwide**.

# How are students assessed on NAEP?

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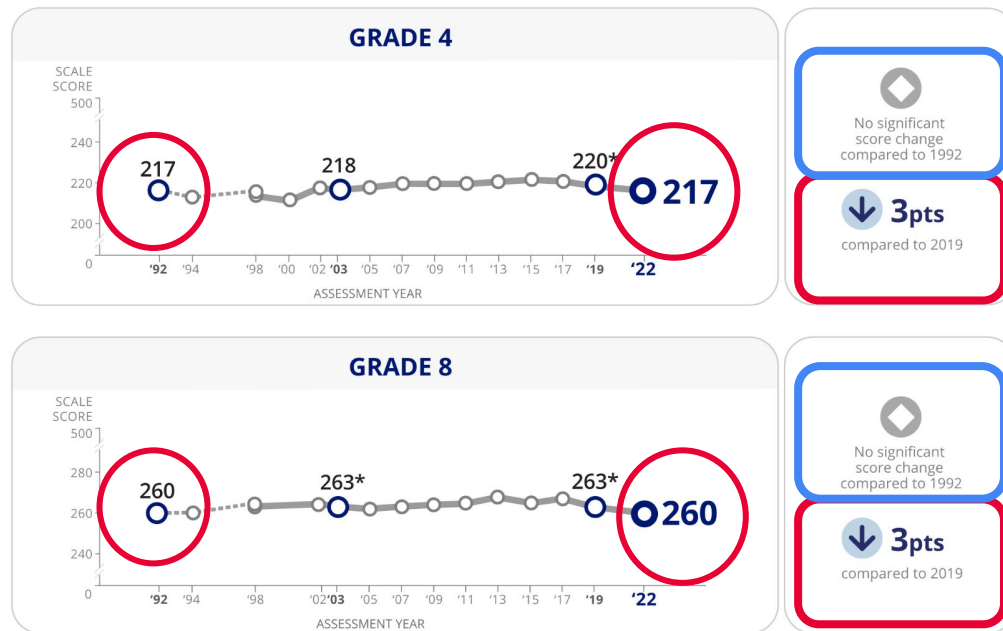
- NAEP assesses **a small, representative sample** of students - no more than a few thousand students per state.
- Building data is **not available** - handful of districts nationwide receive results.
- The sampling technique isn't all too different than **public polling**.
- Results reported with a **margin of error**.
  - ◆ This is a key element in **interpretation** of results.



# Little progress nationally in NAEP reading scores

2022 | NAEP Reading Assessment | Highlights

Nationwide



----- Accommodations not permitted

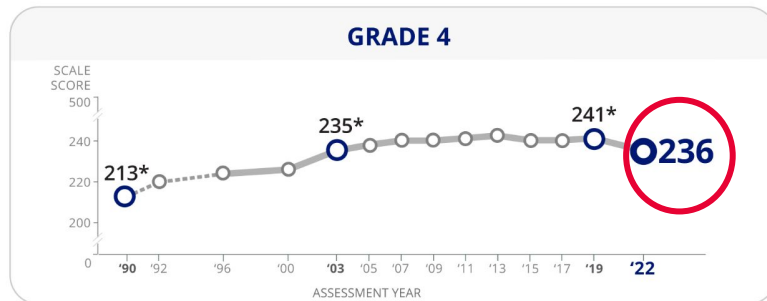
———— Accommodations permitted

\* Significantly different ( $p < .05$ ) from 2022.

# Progress in math scores; larger declines in 2022

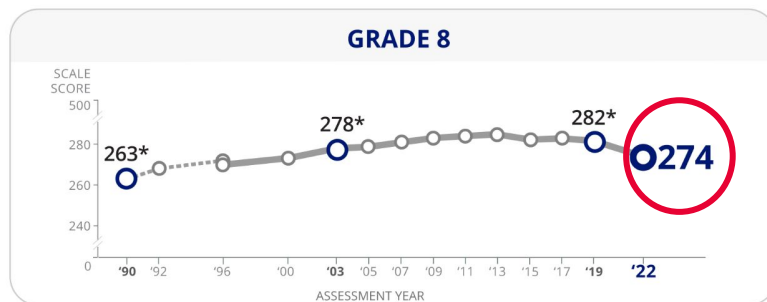
2022 | NAEP Mathematics Assessment | Highlights

Nationwide



↑ 23pts  
compared to 1990

↓ 5pts  
compared to 2019



↑ 12pts  
compared to 1990

↓ 8pts  
compared to 2019

---- Accommodations not permitted

— Accommodations permitted

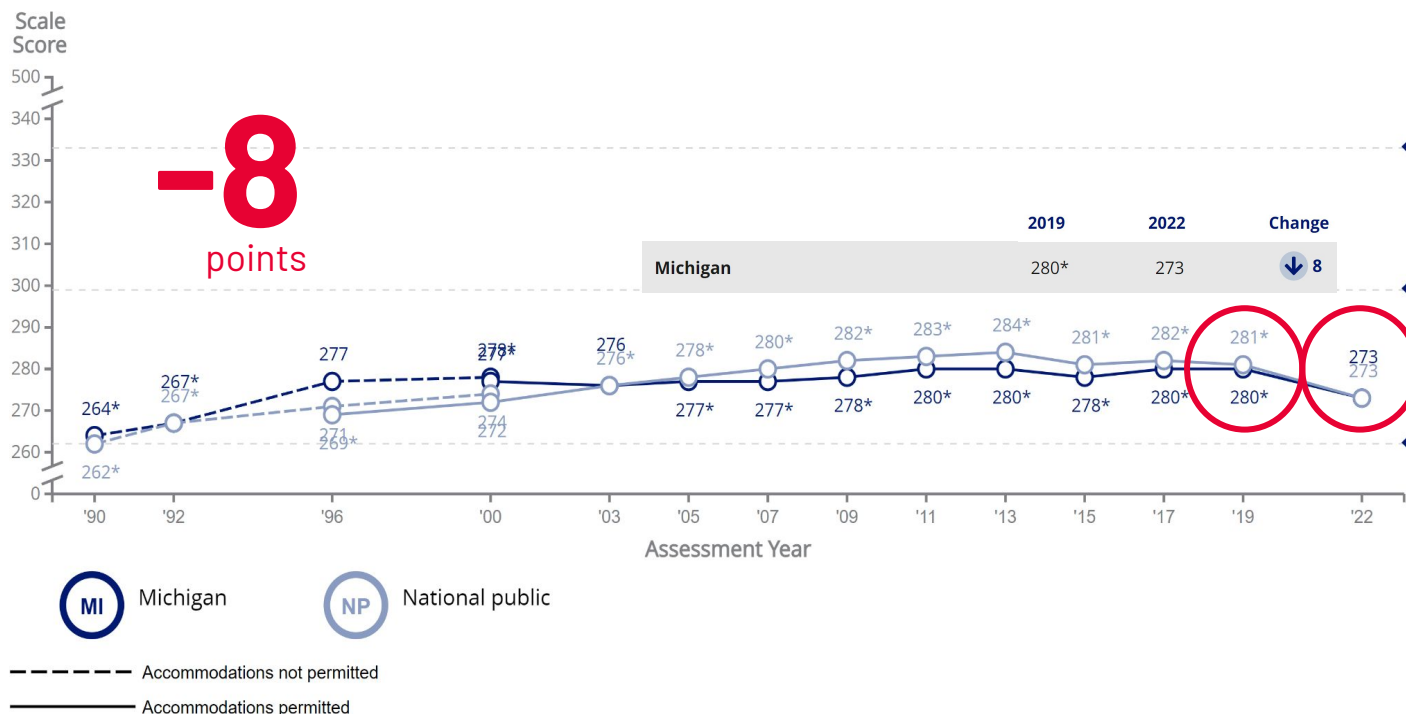
\* Significantly different ( $p < .05$ ) from 2022.



# Large drop in 8th grade math scores in MI; similar in US

## GRADE 8 | MATHEMATICS

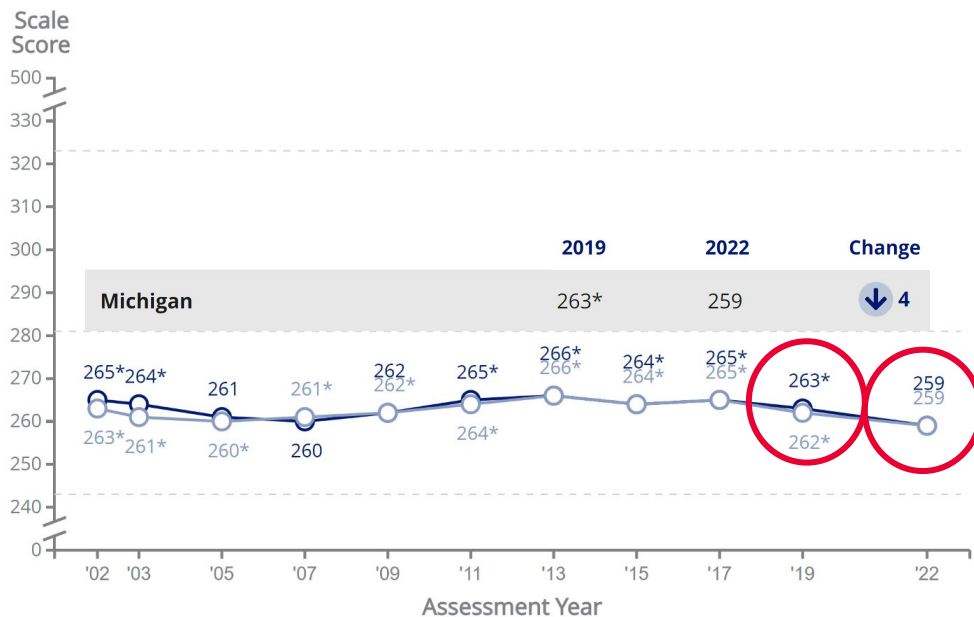
Average scale scores for grade 8 mathematics, by All students [TOTAL] and jurisdiction: 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, and 2022



# Similar trend in grade 8 reading between Michigan and US

## GRADE 8 | READING

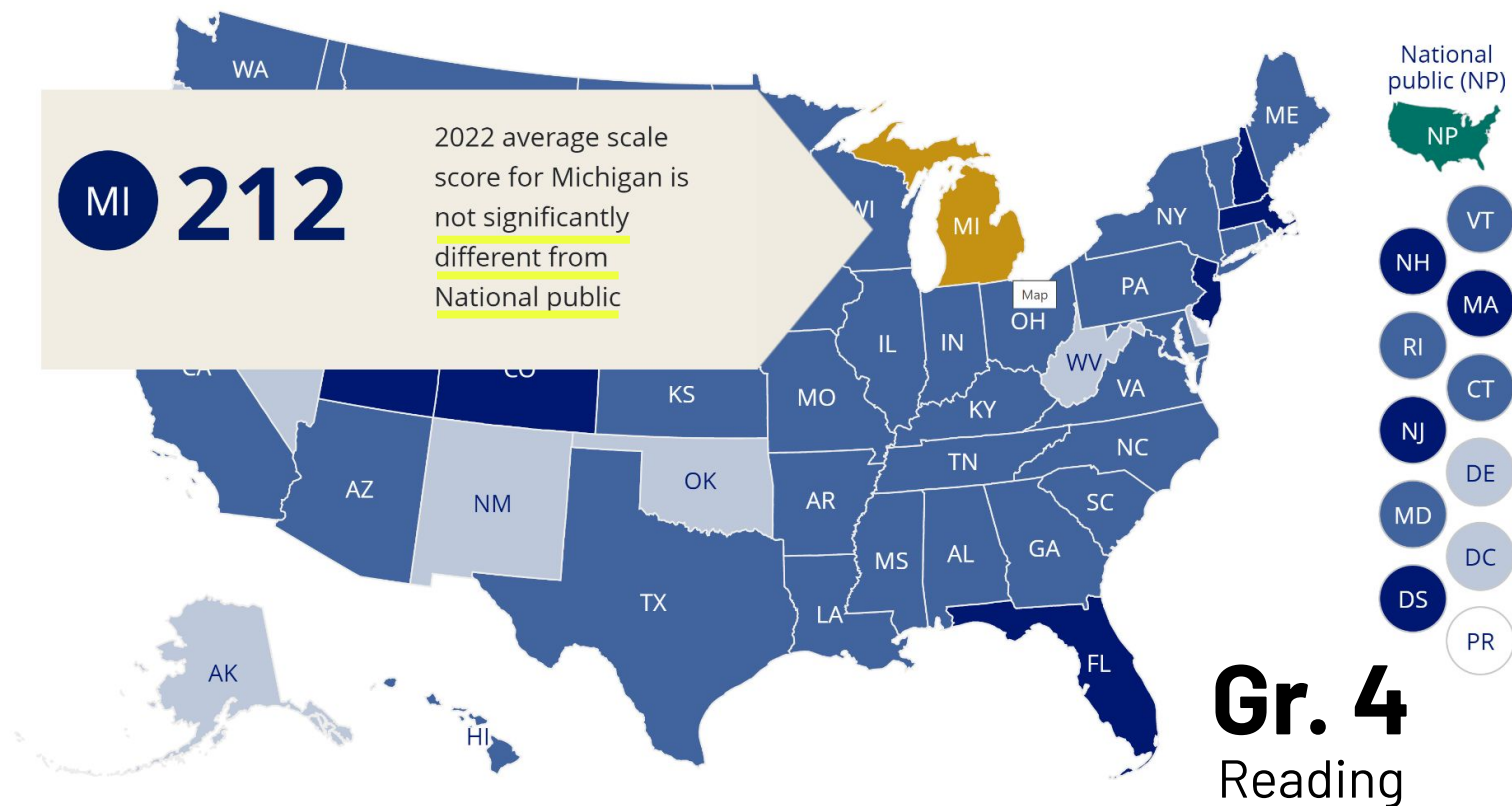
Average scale scores for grade 8 reading, by All students [TOTAL] and jurisdiction: 2002, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, and 2022



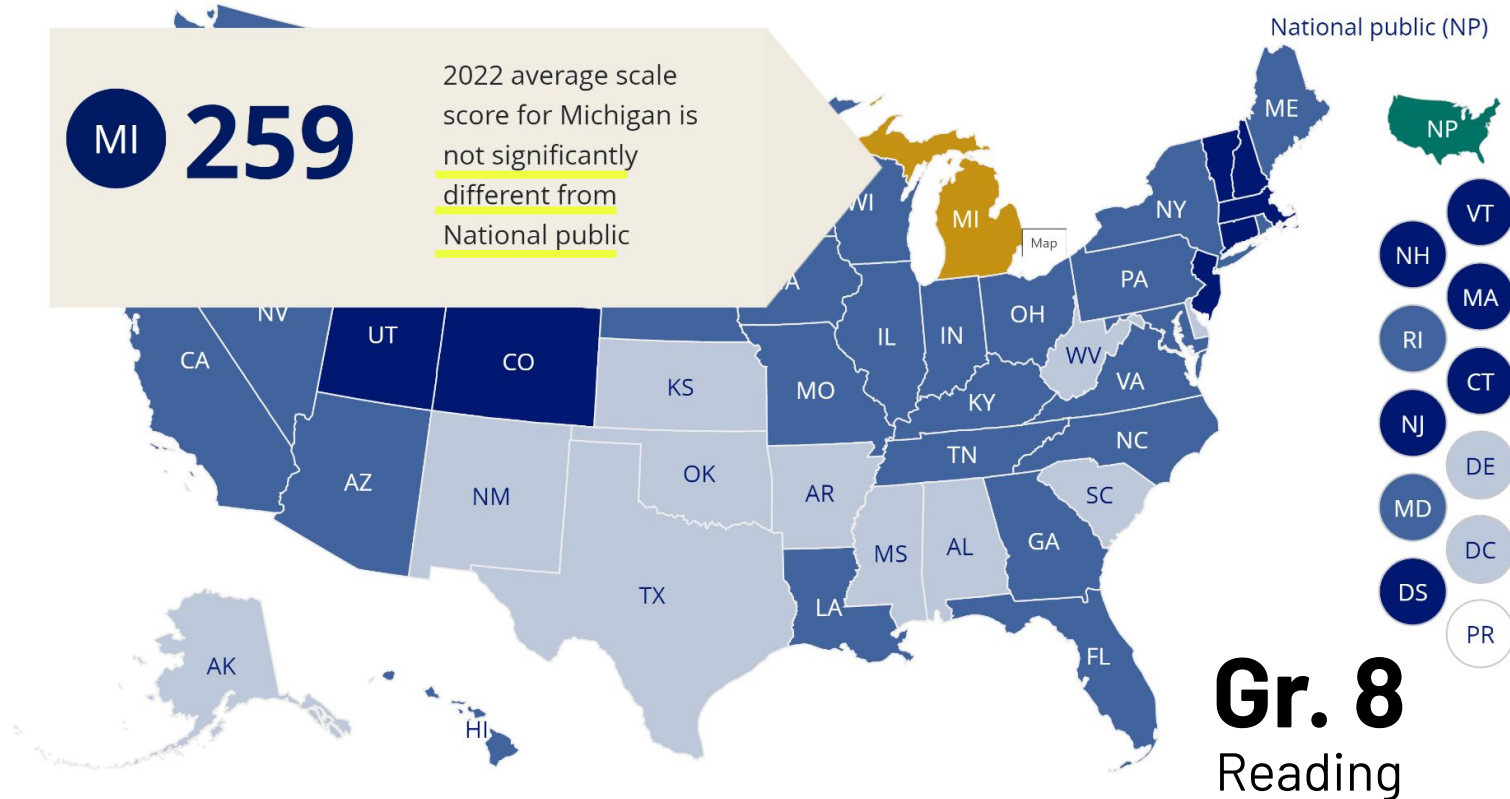
-4  
points



# MI 4th grade reading scores not significant from nation

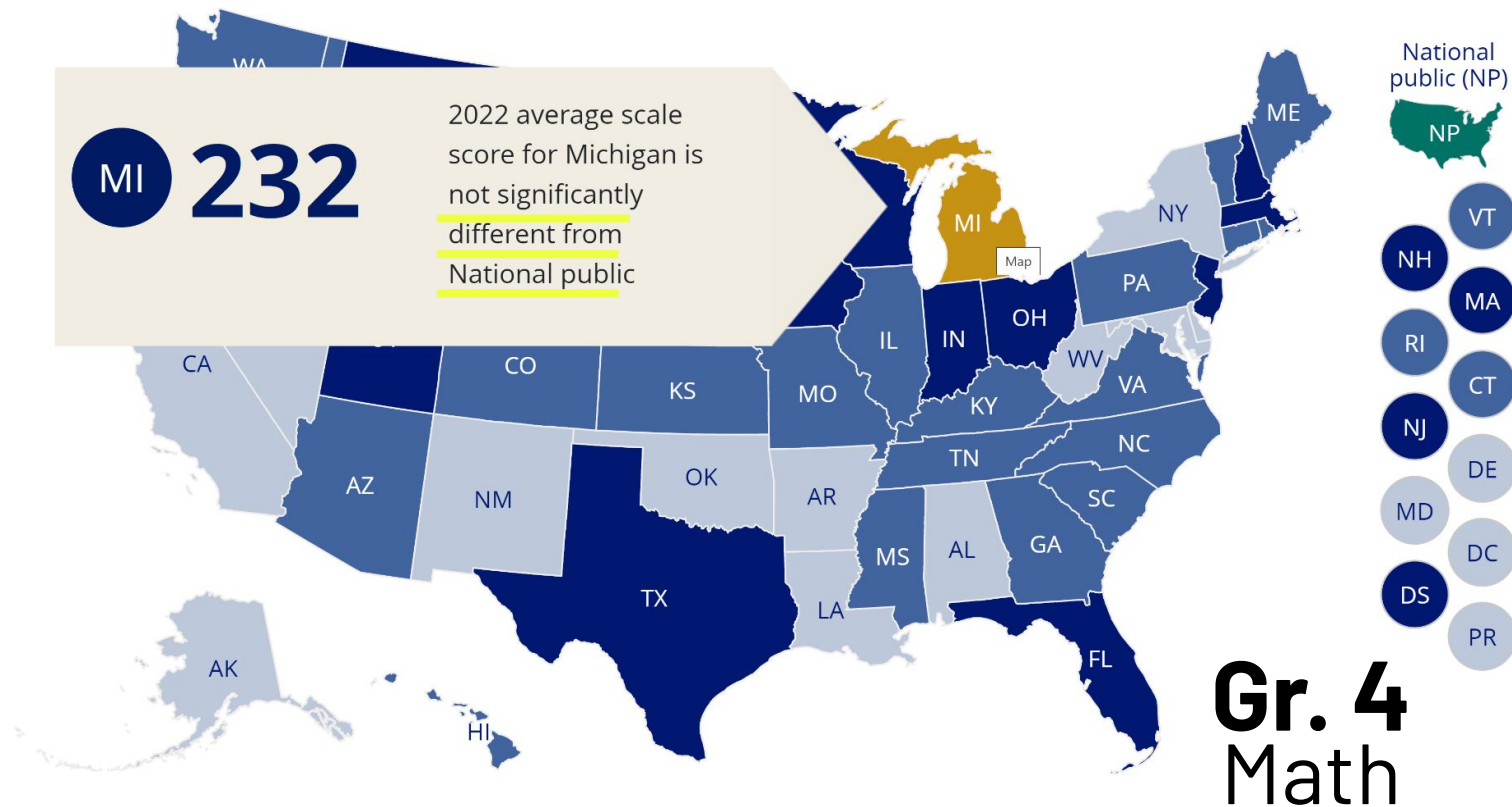


# MI 8th grade reading scores not significant from nation

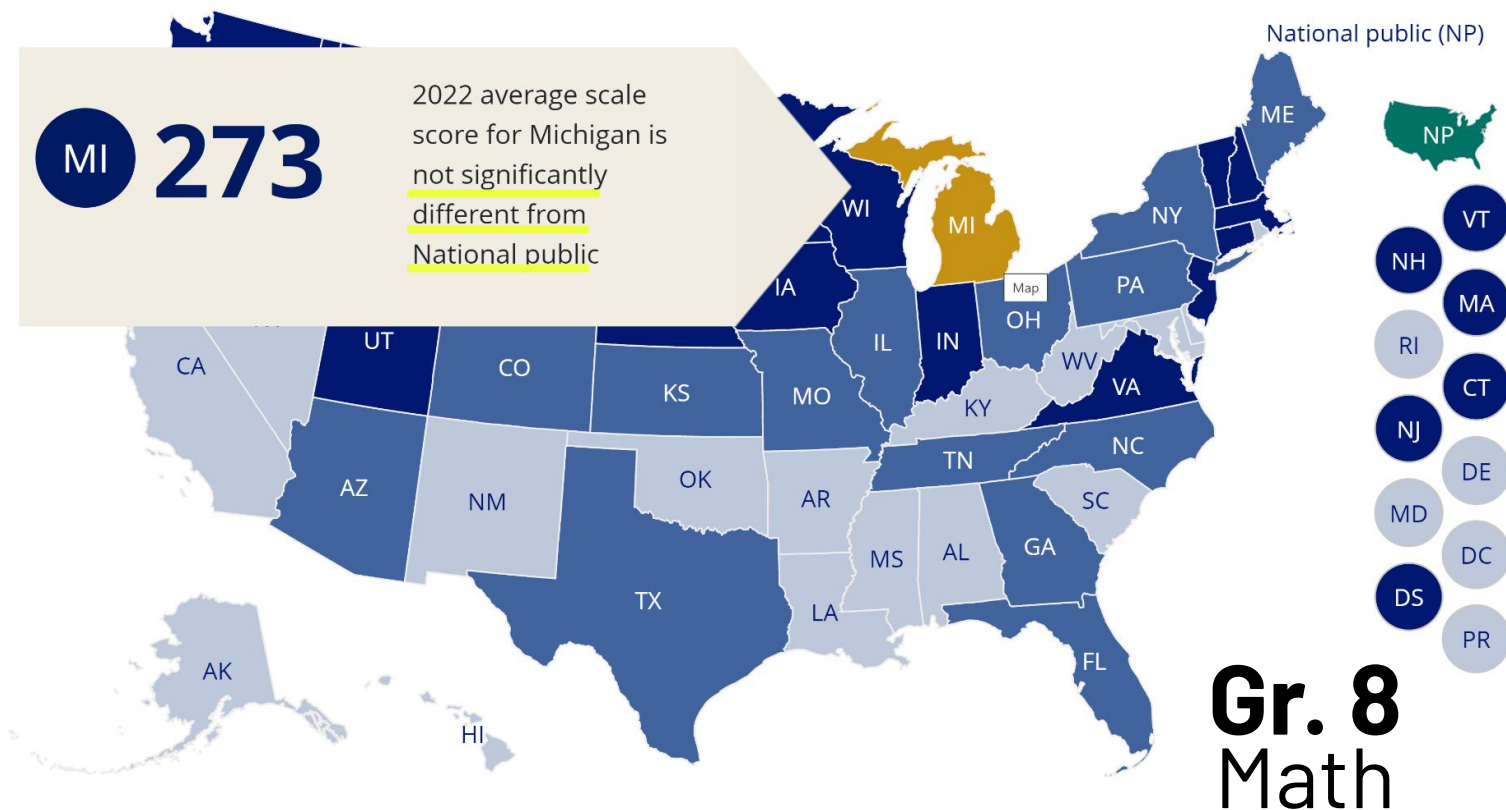




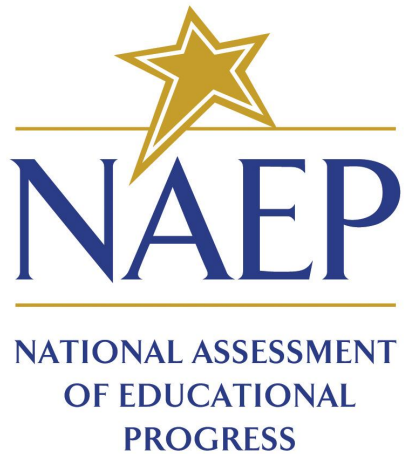
# MI 4th grade math scores not significant from nation



# MI 8th grade math scores not significant from nation







## Gaps between MI White & Black students

	Score Gap <b>2022</b>	Score Gap <b>2019</b>	Score Gap <b>Difference</b>
Gr. 4 Reading	32	25	<b>7</b>
Gr. 8 Reading	27	24	<b>3</b>
Gr. 4 Math	35	30	<b>5</b>
Gr. 8 Math	34	34	<b>-</b>

# Key findings from NAEP results

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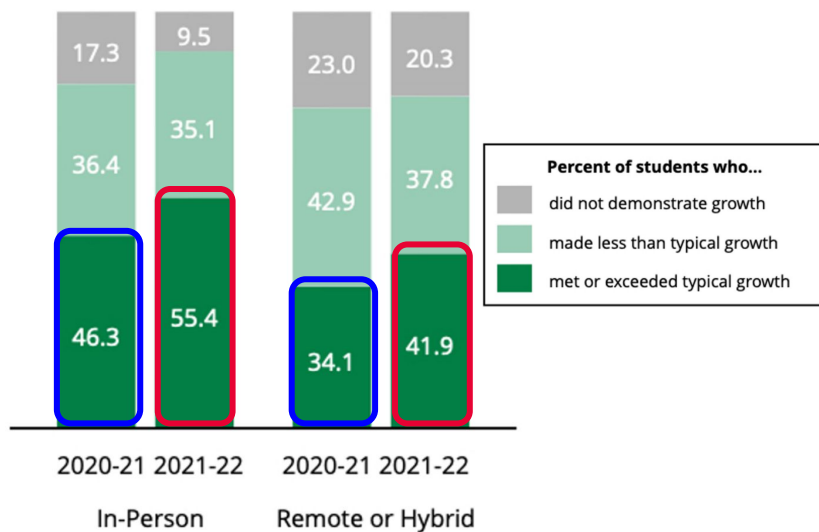
NATIONAL ASSESSMENT  
OF EDUCATIONAL  
PROGRESS

- **Substantial drops** in scores - particularly in **math** - between 2019 and 2022.
- We continue to see **significant gaps** in between **White** and **Black students**.
- Michigan's student performance, however, remains **on par** with the performance of their nationwide peers.

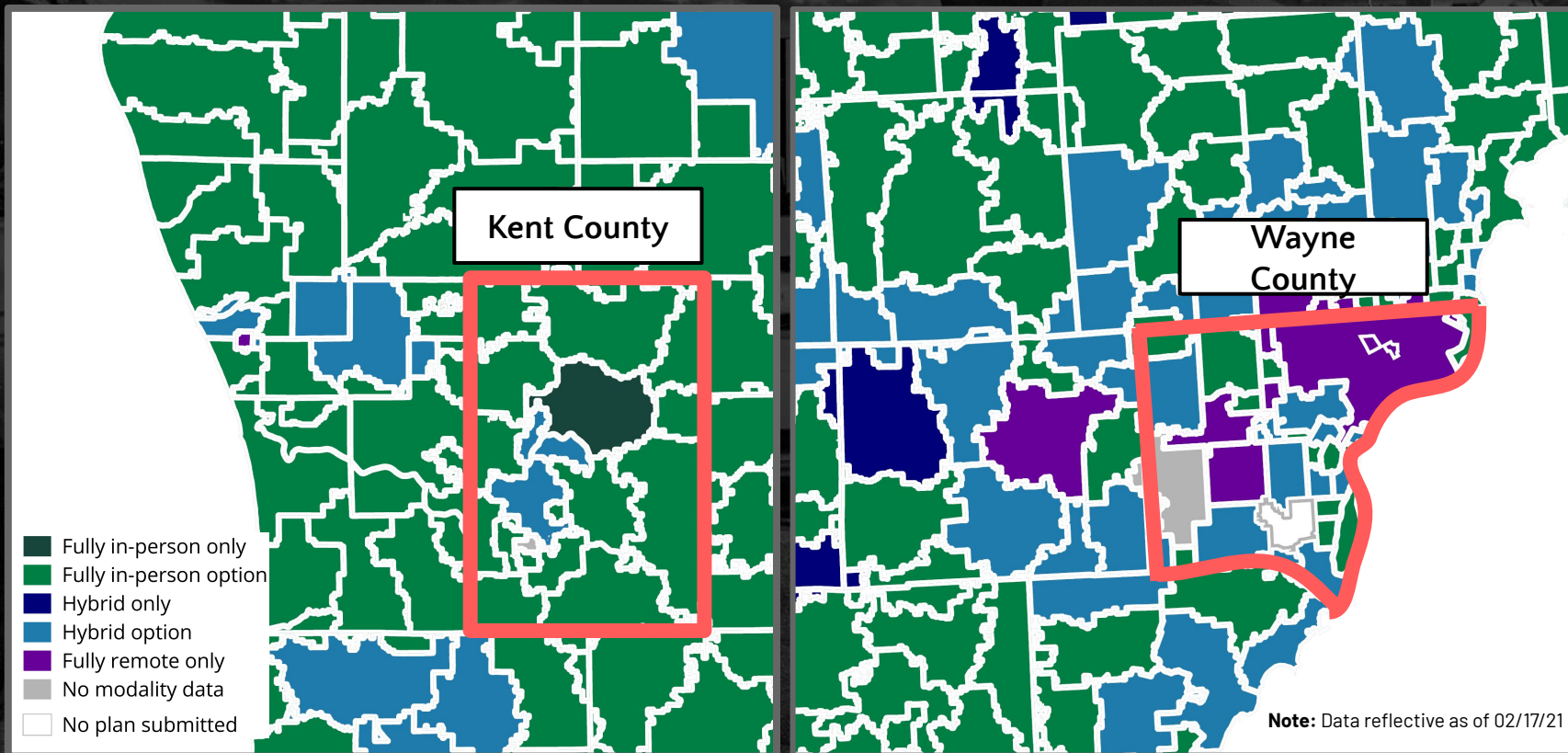


# Real impact for students learning in-person vs. remote

## NWEA MAP Growth (Mathematics)



# Kent County districts provided more in-person instruction than Wayne



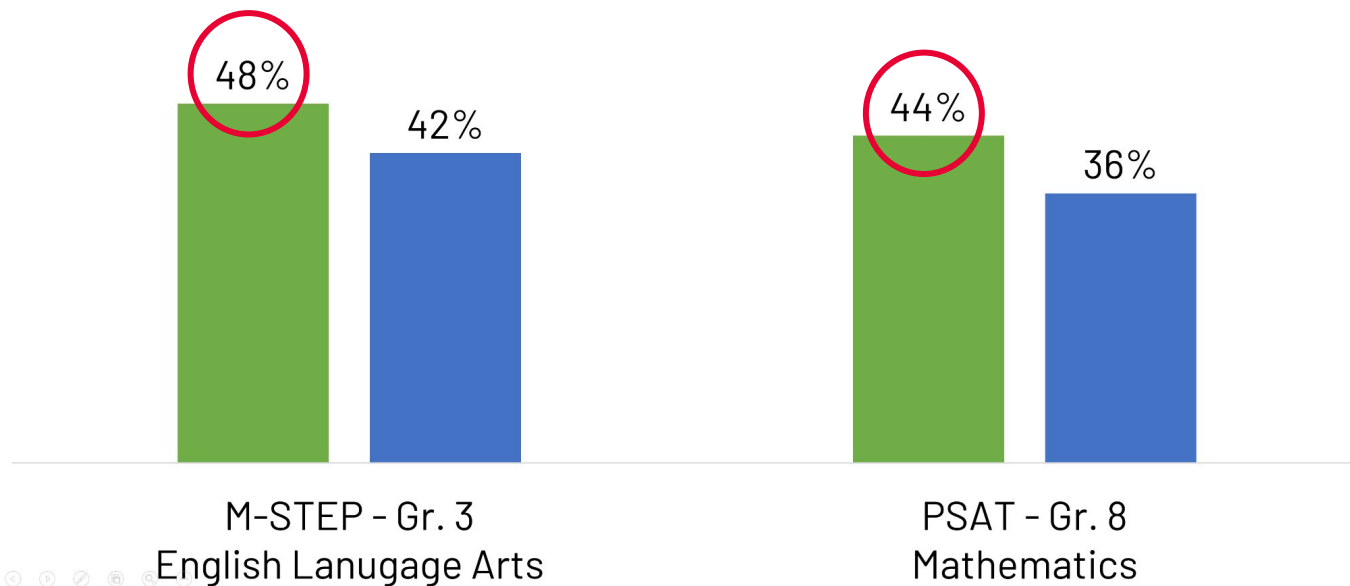


# Kent ISD area students outperforming statewide peers

## State Assessment Results

Percent of Students Meeting Benchmarks – 2021-22

■ Kent ISD ■ Statewide





# Student Wellbeing & the Pandemic

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How students have fared  
in trying times



# Rise in mental health needs in children

**CDC** Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives, Protecting People™

## Morbidity and Mortality Weekly Report (MMWR)

CDC

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persons of all ages declined during the early COVID-19 pandemic (March–April 2020).

### What is added by this report?

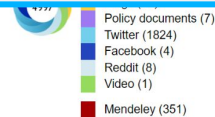
Beginning in April 2020, the proportion of children's mental health–related ED visits among all pediatric ED visits increased and remained elevated through October. Compared with 2019, the proportion of mental health–related visits for children aged 5–11 and 12–17 years increased approximately 24% and 31%, respectively.

### What are the implications for public health practice?

Monitoring indicators of children's mental health, promoting coping and resilience, and expanding access to services to support children's mental health are critical during the COVID-19 pandemic.

## What is added by this report?

Beginning in April 2020, the proportion of children's mental health–related ED visits among all pediatric ED visits increased and remained elevated through October. Compared with 2019, the proportion of mental health–related visits for children aged 5–11 and 12–17 years increased approximately 24% and 31%, respectively.



Citations: 209

Views: 83,785

Views equals page views plus PDF downloads

# Mental health needs remain for US high schoolers

2/13/23, 2:46 PM

Adolescent Behaviors and Experiences Survey (ABES) | CDC



Adolescent and School Health

## Adolescents Are Experiencing a Mental Health Crisis

- More than 1 in 3 high school students experienced poor mental health during the pandemic and nearly half of students felt persistently sad or hopeless.



Many populations that experienced more inequity before the pandemic also had greater risks during the COVID-19 pandemic related to **mental health, suicide, substance use, abuse, and racism.**



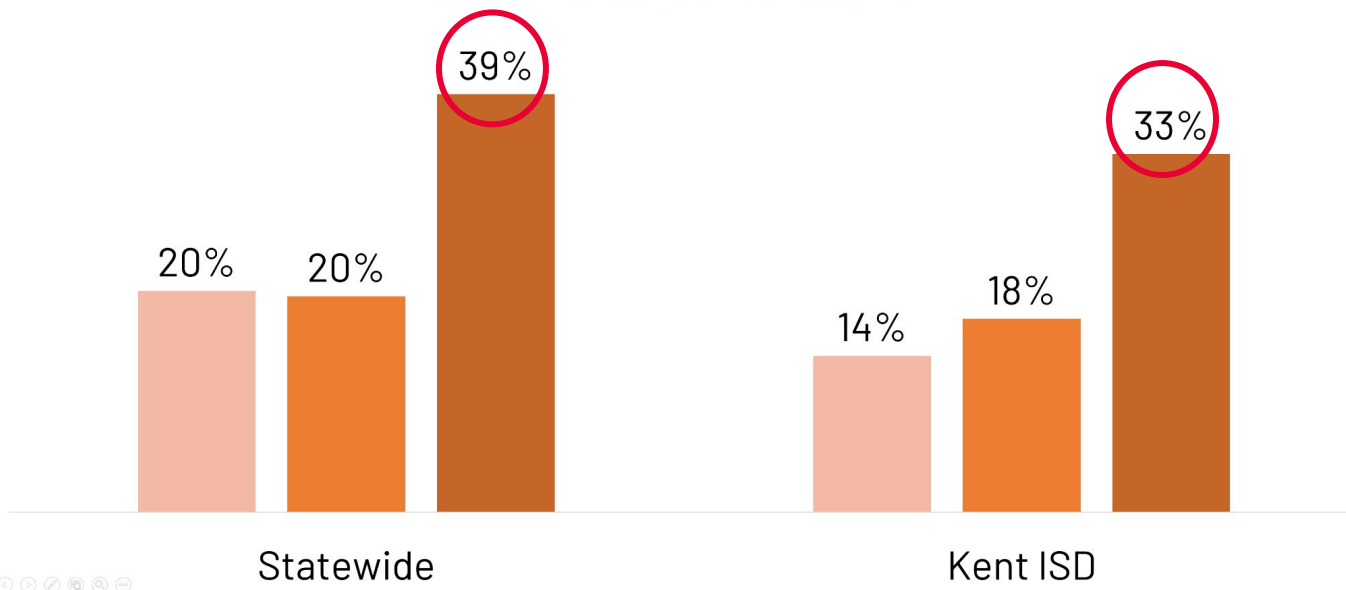


# Significant increase in chronic absences in 2021-22

## Students Chronically Absent

Percent of students missing 10 percent of school year

2019-20 2020-21 2021-22





# Teacher workforce

Trends in perceptions and  
workforce trends





## Teachers Matter

### Understanding Teachers' Impact on Student Achievement

ISAAC M. OPPER

People often emphasize the importance of good teachers, and many local, state, and federal policies are designed to promote teacher quality. Research using student scores on standardized tests confirms the common perception that some teachers are more effective at improving student test scores than others, although standardized tests



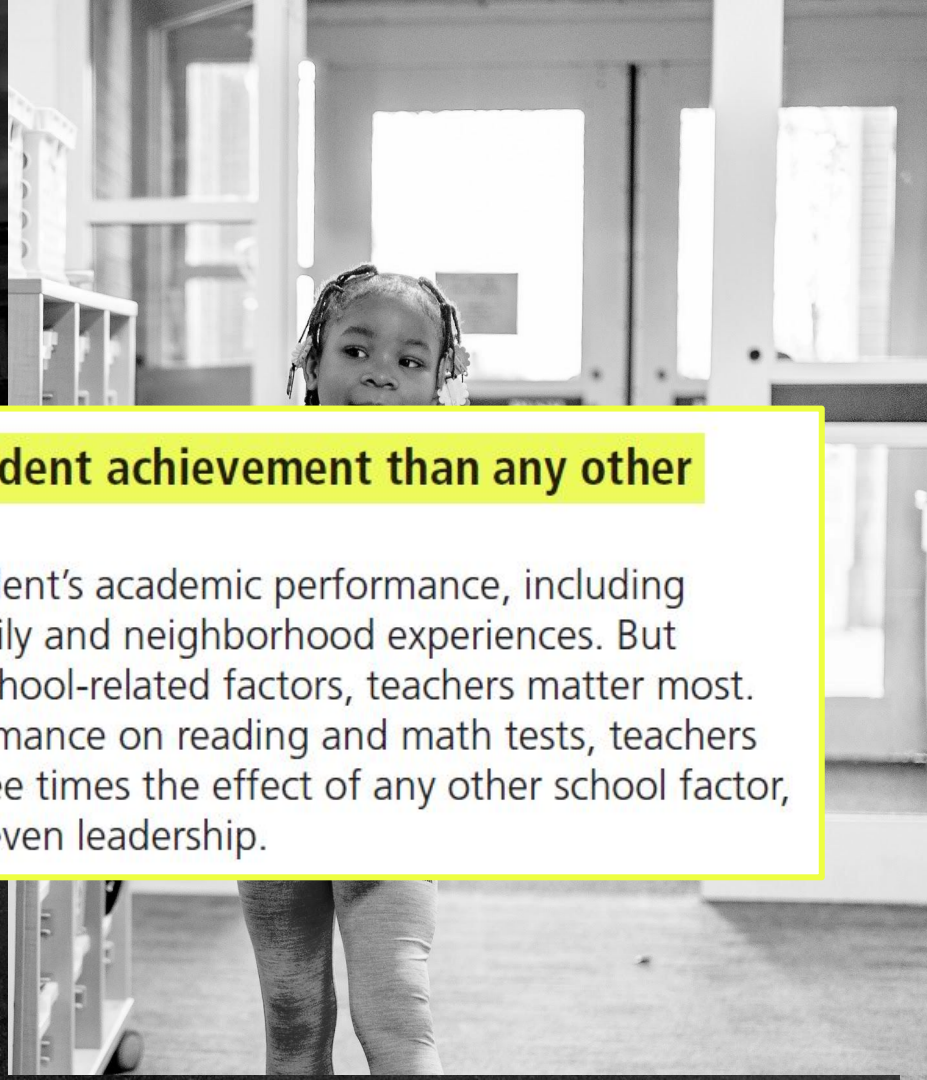
## Teachers matter more to student achievement than any other aspect of schooling.

Many factors contribute to a student's academic performance, including individual characteristics and family and neighborhood experiences. But research suggests that, among school-related factors, teachers matter most. When it comes to student performance on reading and math tests, teachers are estimated to have two to three times the effect of any other school factor, including services, facilities, and even leadership.



Despite common perceptions, effective teachers cannot reliably be identified based on where they went to school, whether they are licensed, or how long they have taught. A better way to assess teachers' effectiveness is to look at their on-the-job performance, including what they do in the classroom and how much progress their students make on achievement tests. This has led to policies that require evaluating teachers' on-the-job performance, based in part on evidence about their students' learning.

WANT TO LEARN MORE?

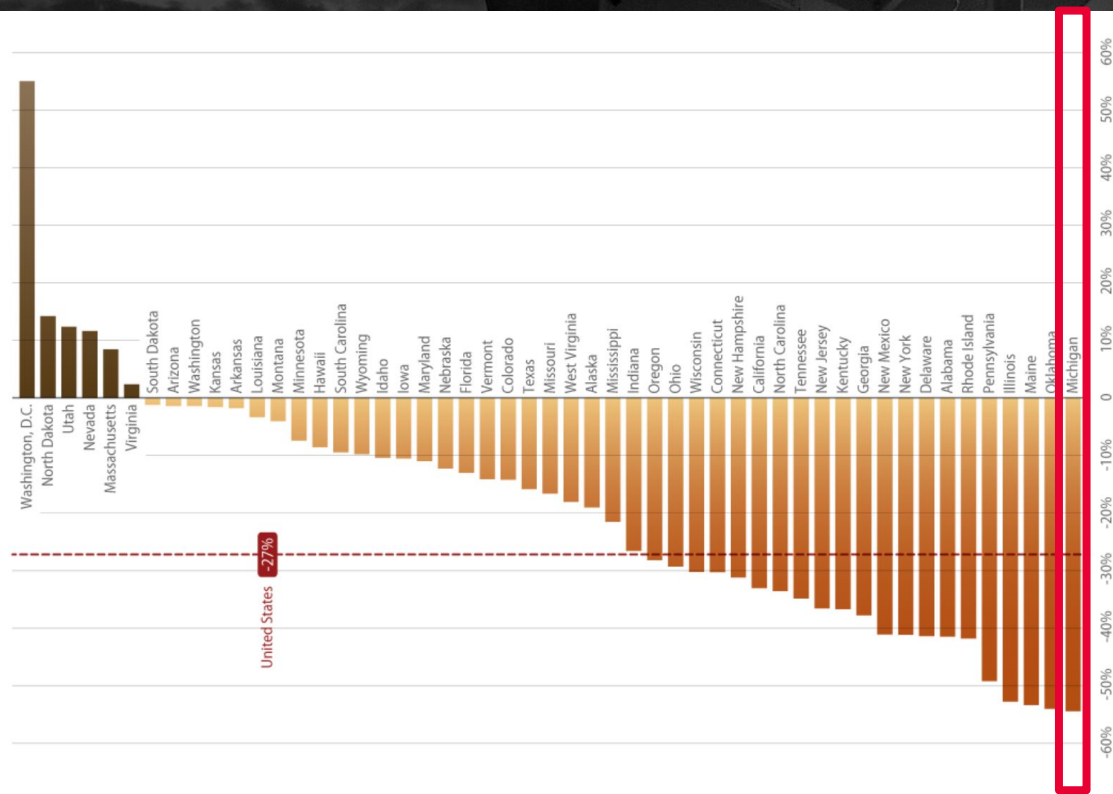


# Michigan last for teacher preparation completion rate change

Percent change in  
students completing  
teacher prep. programs  
by state, 2010-2018

Michigan  
**-54%**

United States  
**-27%**





# Many Michigan teachers not teaching, despite credentials



Institute of  
Education Sciences

STUDY BRIEF  
April 2021

Regional Educational  
Laboratory Midwest

At American Institutes for Research

## Michigan Teachers Who Are Not Teaching: Who Are They, and What Would Motivate Them to Teach?

Statewide teacher shortages in Michigan are impeding efforts to ensure all students equitable access to qualified teachers. To alleviate shortages, education leaders have considered recruiting certified teachers who are not currently teaching (both those who have never taught and those who left teaching). This study analyzed teacher certification and employment data and data from a survey of certified teachers who were not teaching in a Michigan public school in 2017/18 to gather information on the viability of this recruitment option. The report describes the characteristics of these nonteaching certified teachers, the three most important reasons why they are not teaching, and the three most important incentives that would motivate them to teach in a public school in the state. The study found that approximately 61,000 teachers certified in Michigan were not teaching in the state's public schools in 2017/18. A survey of nonteaching certified teachers found that they most frequently selected wanting a higher salary as one of the three most important reasons why they were not teaching and that they most frequently selected an increase in salary as one of the three most important incentives that would motivate them to teach. Respondents also frequently selected financial incentives, such as allowing retirees to retain their retirement benefits, improving other benefits, and forgiving student loans, as one of their three most important incentives. Nonteaching certified teachers might consider becoming a public school teacher

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# 61,000

teachers not teaching

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# 102,055

total teachers in MI\*

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**\*Note:** Data for 2017-18 school year

# Understanding from policymakers top issue for profession

## Top issues affecting career satisfaction



Whether or not you are thinking about leaving education, how much impact does each of the following have on your level of satisfaction with education as a career? (LARGE IMPACT)



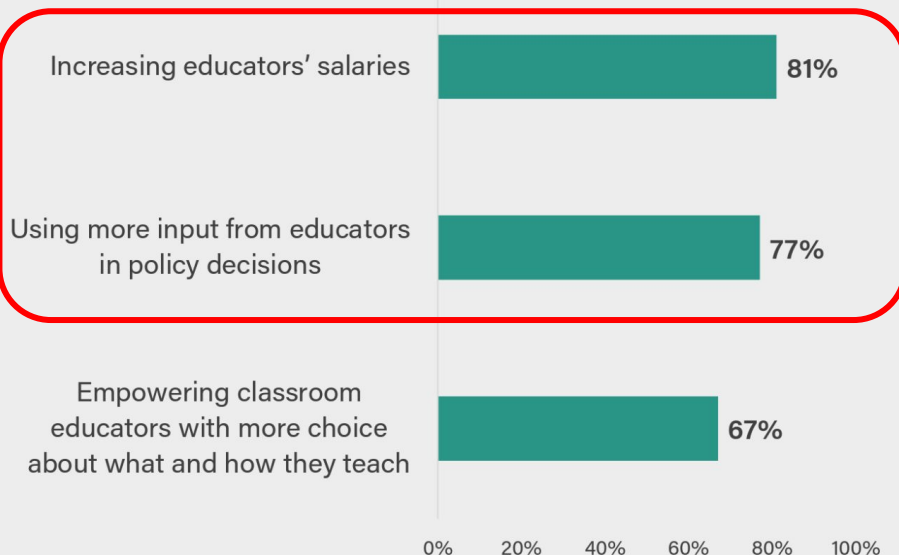


# Salary and input top changes to improve teacher respect

## Top changes that would show respect for educators



For each of the following, how much impact do you believe it would make in showing respect for the education profession? (LARGE IMPACT)

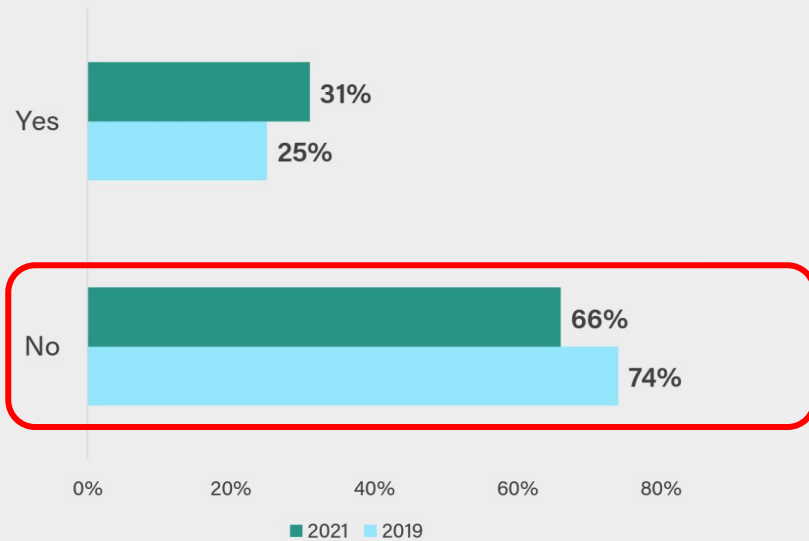


# Educators would not recommend profession to others

Just three in ten would recommend education as a career field – little change from 2019.



(TEACHERS, ADMINISTRATORS, EDUCATORS; N=4,730) Would you recommend education as a career field for young people you know?







# Do resources matter?

Research on the impact of  
spending on student  
outcomes



# COVID-19 pandemic and federal funds

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- In response to the COVID-19 pandemic, districts nationwide received significant federal resources - roughly \$190 billion.
- ◆ Michigan received roughly \$6 billion.
- One-time funds ranged from **academic interventions** and **mental health services** to upgrades to **ventilation** and **sanitation**.
- Questions remain on the **impact** of funds.





# California: Resources for needy students makes a difference



## Abstract

This study of California's recent major school finance reform, the Local Control Funding Formula, is among the first to provide evidence of LCFF's impacts on student outcomes. The study looked at per-pupil revenue, high school graduation rates, and student achievement for each grade and subject (mathematics and reading) for all public schools in California. The results show that LCFF-induced increases in district revenue led to a significant reduction in the average school-level student-to-teacher ratio and significant increases in average teacher salaries and instructional expenditures. LCFF-induced increases in school spending led to significant increases in high school graduation rates and academic achievement, particularly among children from low-income families. These improvements in high school academic achievement closely track the timing of LCFF implementation, school-age years of exposure, and the amount of district-specific LCFF-induced spending increase. In sum, the evidence suggests that money targeted to students' needs can make a significant difference in student outcomes and can narrow achievement gaps.

This brief can be found online at <https://learningpolicyinstitute.org/product/ca-school-finance-reform>.

This research was funded in part by the Raikes Foundation. Core operating support for the Learning Policy Institute is provided by the Sandler Foundation, the William and Flora Hewlett Foundation, and the Ford Foundation.

**A \$1,000 increase in funding [per pupil] - induced by California's Local Control Funding Formula (LCFF) - led to an increase of roughly **seven months of learning** in mathematics for low-income children.**

**...In sum, the evidence suggests that money targeted to students' needs can make a **significant difference** in student outcomes and can narrow achievement gaps.**



# National school finance reforms led to higher NAEP scores

*American Economic Journal: Applied Economics* 2018, 10(2): 1–26  
<https://doi.org/10.1257/app.20160567>

## School Finance Reform and the Distribution of Student Achievement

*Progress, we find that reforms cause increases in the achievement of students in these districts, phasing in gradually over the years following the reform. The implied effect of school resources on educational achievement is large. (JEL H75, I21, I22, I24, I28)*

*representative samples from the National Assessment of Educational Progress, we find that reforms cause increases in the achievement of students in these districts, phasing in gradually over the years following the reform. The implied effect of school resources on educational achievement is large. (JEL H75, I21, I22, I24, I28)*

Economists have long been skeptical of resource-based education policies, based in part on observational studies showing small or zero effects of additional funding (see, e.g., Coleman et al. 1966, Hanushek 1986, Hanushek 2006).<sup>11</sup> Hanushek,





# Impact of resources goes beyond schooling into adulthood

NBER WORKING PAPER SERIES

THE EFFECTS OF SCHOOL SPENDING ON EDUCATIONAL AND ECONOMIC OUTCOMES:  
EVIDENCE FROM SCHOOL FINANCE REFORMS

C. Kirabo Jackson

models reveal that a 10 percent increase in per-pupil spending each year for all twelve years of public school leads to 0.27 more completed years of education, 7.25 percent higher wages, and a 3.67 percentage-point reduction in the annual incidence of adult poverty; effects are much more pronounced for children from low-income families. Exogenous spending increases were associated with sizable improvements

We wish to thank the PSID staff for access to the confidential restricted-use PSID geocode data, and confidential data provided by the National Center for Education Statistics, US Department of Education. This research was supported by research grants received from the National Science Foundation under Award Number 1324778 (Jackson), and from the Russell Sage Foundation (Johnson). We are grateful for helpful comments received from Larry Katz, David Card, Caroline Hoxby, several anonymous referees, and seminar participants at UC-Berkeley, Harvard University, NBER Summer Institute, Institute for Research on Poverty Summer Workshop, Mannheim University, and Stockholm University. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-





## Wrapping up

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Key takeaways from today



# Key takeaways from today's session

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- Our student population is becoming **much more diverse**.
- The pandemic has had **large and varying impacts** on our students **academically, socially** and **emotionally**.
- Multiple factors are impacting the **teacher workforce** – including respect, pay and stress.
- **Research** suggests that **resources** can make a significant **impact** on student outcomes.



# Thanks!

# Questions?

Sunil Joy

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