

Summary Points

- Arkansas' scores continue to steadily decline, in most cases to the lowest scores in 21 years.
- The performance gap between Arkansas and its border states **widened** due to improved scores among the border states and continued declines among Arkansas students.
- Scores between student groups have widened mostly.
- 4th grade reading gap among FRL and Non-FRL students narrowed, but was due to the decline of Non-FRL student scores.
- 8th grade reading gap among White students and their Black peers narrowed due to an increase in scores among the Black student population.
- Proficiency percentages are higher on the ATLAS exam compared to the NAEP assessment with the exception of 4th grade math where there is a higher percentage of students that are proficient in the NAEP exams.

National Assessment of Education Progress (NAEP) Results: 2024

The National Center for Education Statistics has released this year's NAEP results which measure nationwide student performance in 4th and 8th grade reading and math. NAEP is administered nationally to a representative sample of students from all 50 states, so acts as a standard measure of student performance across states and time. In this policy brief we examine Arkansas' 2024 results and examine score gaps between student groups.

NAEP Results: Statewide

The 2024 results show that 8th grade math scores for Arkansas students remain essentially unchanged over time as seen in Figure 1. Arkansas' 4th grade math scores, after experiencing a steady decline since 2015, increased by 2 points in 2024.

8th grade students in Arkansas scored similarly in reading in 2024 compared to their 2022 scores. However the 4th grade reading scores in the state

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continue to steadily decline, reflecting the lowest scores in the past twenty one years. It should be noted that these 4th grade students would have been in Kindergarten in 2020 during the COVID-19 pandemic. At this time, learning was disrupted creating a lot of uncertainty and instability among student, parents and teachers during that time. This implies that core foundations that students' needed for long-term success might not have been established as a result of the COVID disruption. It should be considered whether the decline in reading scores is a residual impact of that time.

Figure 1: Average Scale Score on Arkansas' NAEP Exams, 2003-2024

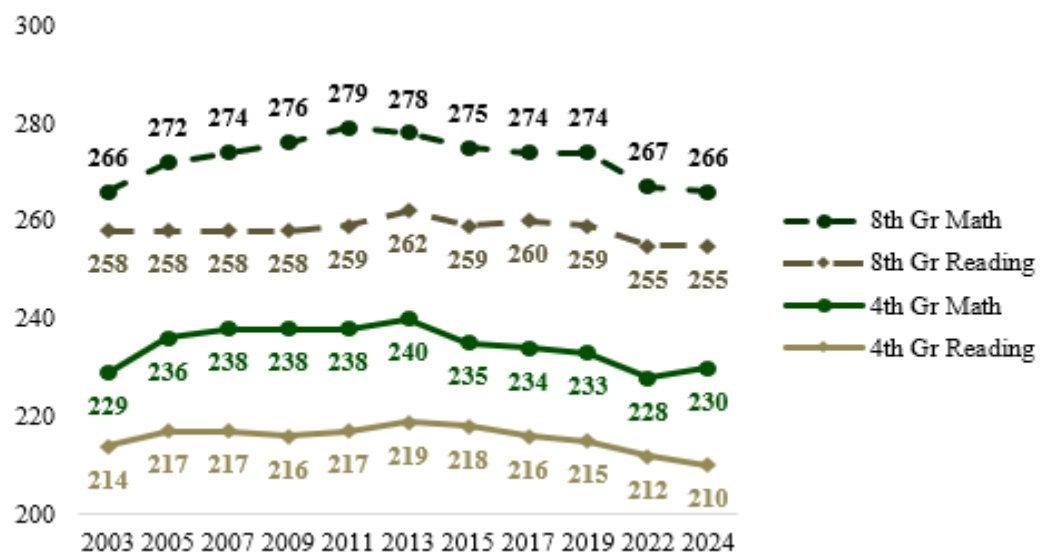


Table 1: Student Demographics for Arkansas (2024), Border States, and US

	% White	% Black	% Hispanic	% FRL
AR	58%	19%	15%	59%
Border States	46%	24%	19%	60%
US	44%	15%	29%	50%

Border States: Louisiana, Missouri, Mississippi, Oklahoma, Tennessee, Texas

Figure 2: NAEP Mean Scale Score for 4th Grade Mathematics: Arkansas, Border States, and US 2003-2024

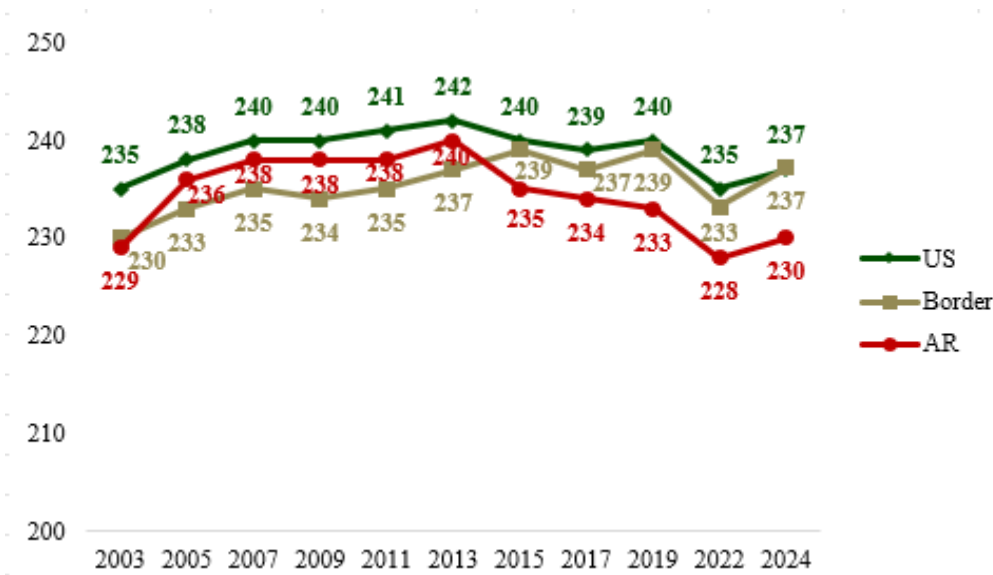


Figure 3: NAEP Mean Scale Score for 8th Grade Mathematics: Arkansas, Border States, and US, 2003-2024



How Do we Compare?

Arkansas continues to perform below the national level in math and reading in both tested grade levels.

Arkansas serves a higher percentage of Free and Reduced Lunch (FRL) Eligible students than the national average (see Table 1). Since FRL is a proxy for Poverty, and higher poverty rates are associated with lower test scores in standardized testing, it is not surprising that Arkansas underperforms in comparison to the country as a whole.

Arkansas serves a similar percentage of FRL students compared to its border states, yet it consistently scores lower in both 4th and 8th grade math. As seen in Figure 2, Both Arkansas and its border states have experienced an increase in 4th grade math scores compared to their prior test year. The border states, on average, now score similarly to the national score whereas the gap between them and Arkansas persists.

Arkansas showed a continued decline in 8th grade Math scores where its border states maintained their score from the previous test year (see Figure 3).

While both Arkansas and the border states are below the national average, the difference between the trajectory of math scores before 2013 and after 2013 raise concerns about Arkansas students falling further behind their peers nationally and in the border states.

Arkansas continues to decline in its 4th grade reading scores. Its border states have shown a slight increase in 4th grade reading scores and are now scoring similarly to the national results (see Figure 4).

Arkansas' 8th grade reading students experienced no change in scores in 2024 compared to the prior testing year. The border states, however, show a one point decline in 2024 compared to the prior testing year (see Figure 5). Both Arkansas and the border states are performing similarly to the national average, which has been on a steady decline.

Similar to the pattern in mathematics, Arkansas's reading scores demonstrate a different trajectory before 2013 than after 2013. Having obtained the lowest reading scores in 21 years in both 4th and 8th grades demonstrates the need for change.

Figure 4: NAEP Mean Scale Score for 4th Grade Reading: Arkansas, Border States and US, 2003-2024

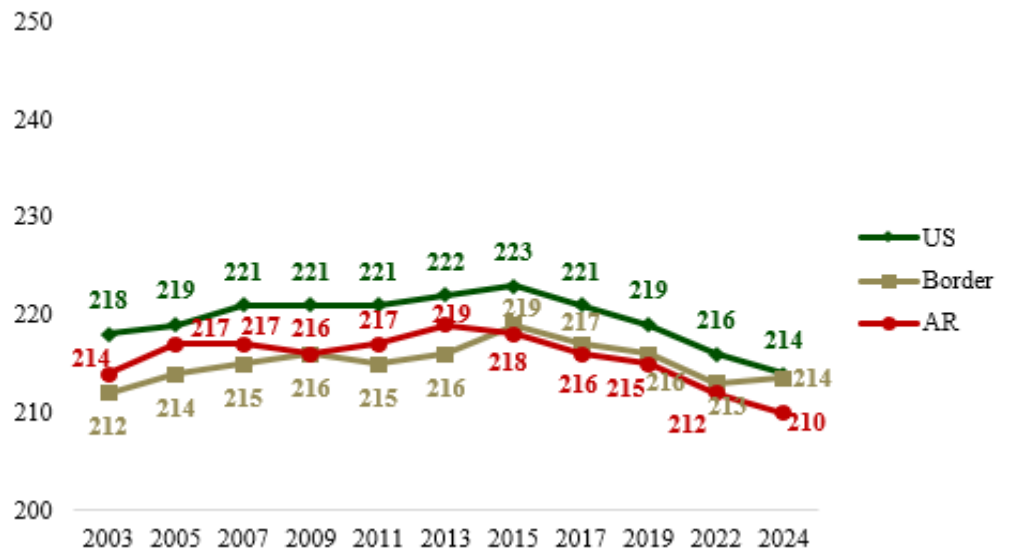
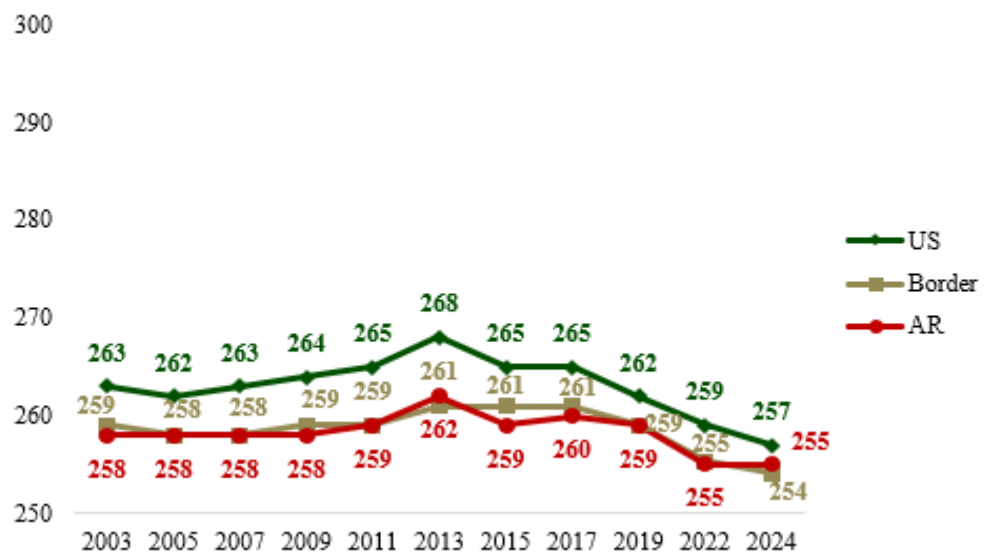


Figure 5: NAEP Mean Scale Score for 8th Grade Reading: Arkansas, Border States and US, 2003-2024



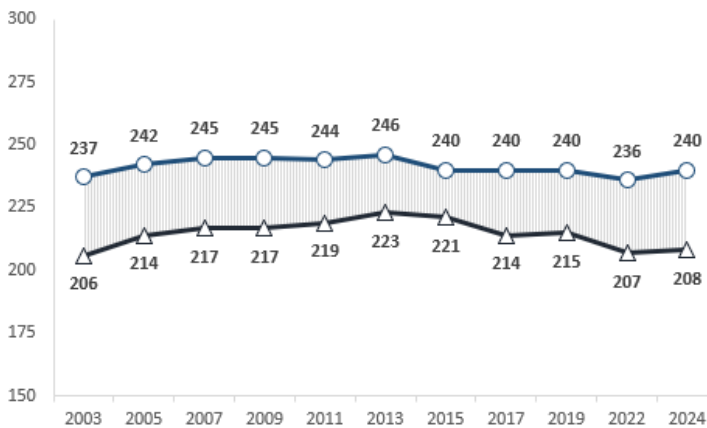
Score Gaps for Student Groups: Mathematics

In light of the overall decline in scores nationally and for Arkansas' students overall, it is even more important to examine if gaps between the performance of student groups are decreasing, increasing, or remaining the same over time. In considering score gaps, it is critical to not only consider the magnitude of the gap, but the trends behind any change.

Figure 6 presents the NAEP math score gaps between White and Black students in 4th and 8th grade from 2003-2024. White students on average score 27 points higher than Black students in 4th grade math, and more than 30 points higher in 8th grade math. 2024 shows the gap between White and Black students widening slightly in both 4th and 8th grade math scores. The gap increase is due to a higher increase in scores among White students compared to their Black peers in 4th grade math, and due to Black students declining in 8th grade where the White students showed a slight increase.

Figure 6: Arkansas' NAEP Mean Scaled Score for Math, White and Black, 2003-2024

4th Grade



8th Grade

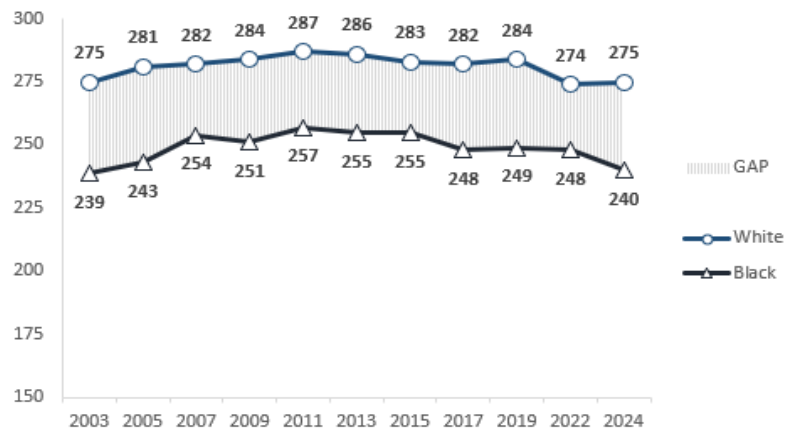
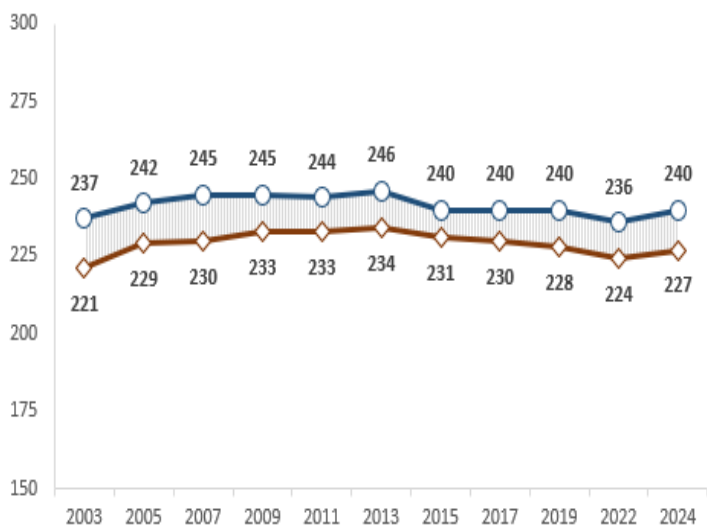


Figure 7 presents the NAEP math score gaps between White and Hispanic students in 4th and 8th grade math from 2003 to 2024. White students generally score 12 points higher than Black students in 4th grade math, and 15 points higher in 8th grade math. In 2024, the math performance differences between White and Hispanic students increased slightly for both 4th and 8th grade. 4th grade scores for both groups of students increased, but 8th grade Hispanic students maintained the same score as the previous test year.

Figure 7: Arkansas' NAEP Mean Scaled Score for Math, White and Hispanic, 2003-2024

4th Grade



8th Grade

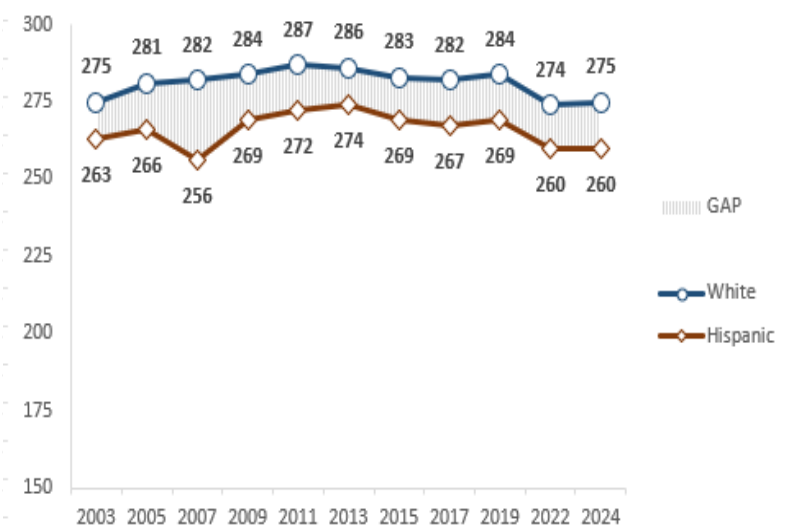
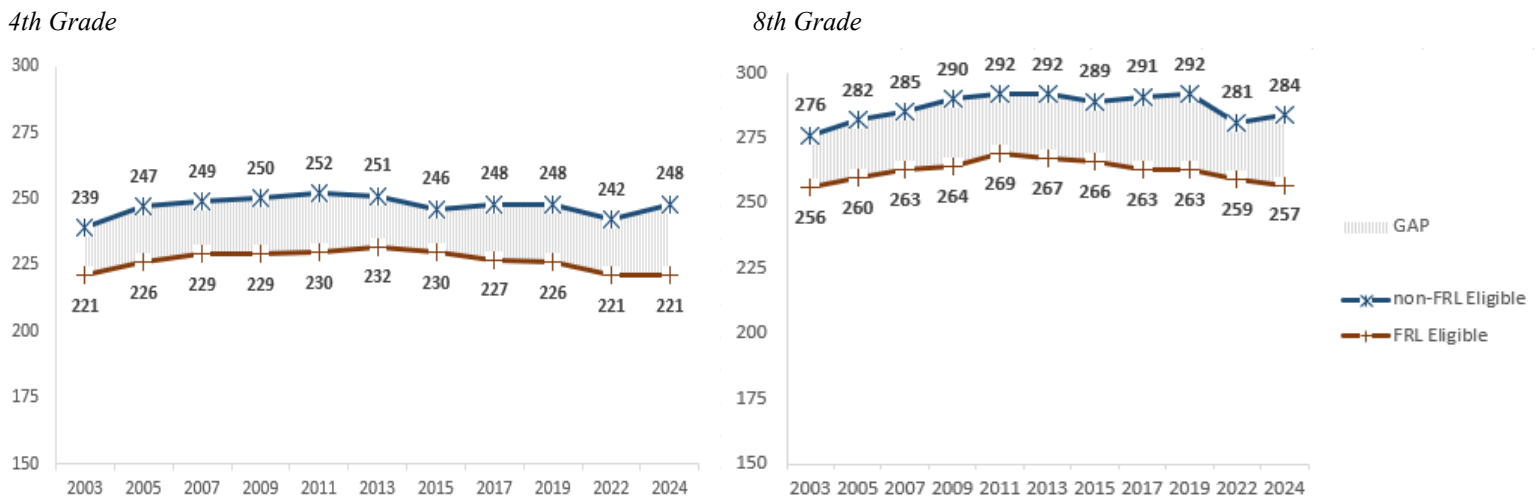


Figure 8 presents the NAEP math score gaps between students who are eligible for the federal Free/ Reduced Lunch Program and students who are not eligible. Eligibility for the program is determined by household income so this measure is often used as a proxy for poverty. The figure again includes students in 4th and 8th grade math from 2003 to 2024. Not surprisingly, students from more economically advantaged backgrounds score higher than students who face greater economic challenges. Non-FRL Eligible students historically score 21 points higher than FRL Eligible students in 4th grade math and 24 points higher in 8th grade math. In 2024, the math performance differences between Non-FRL Eligible and FRL Eligible students increased in 4th grade students, showing the largest gap in 21 years due to scores remaining consistent among FRL Eligible students but increased among Non-FRL Eligible students. Among 8th graders, the widened gap is due to a continued decline among the FRL Eligible students while there is an increase in scores among its Non-FRL Eligible peers in 2024.

Figure 8: Arkansas' NAEP Mean Scaled Score for Math, by Free/ Reduced Lunch Eligibility, 2003 to 2024



Score Gaps for Student Groups: Reading

Figure 9 shows NAEP reading scores among 4th grade White students have been slowly declining in the last 9 years, and the 2024 results reflect the lowest scores in 21 years. The gap between White and Black students in 4th grade reading has narrowed in 2024 due to an increase in scale score among Black students.

White students in 8th grade reading have also received the lowest score in 2024 in 21 years. The gap, however, between White and Black students in this grade level has narrowed due to an increase in scale score among Black students in 2024.

Figure 9: Arkansas' NAEP Mean Scale Score for Reading, White and Black, 2003 to 2024

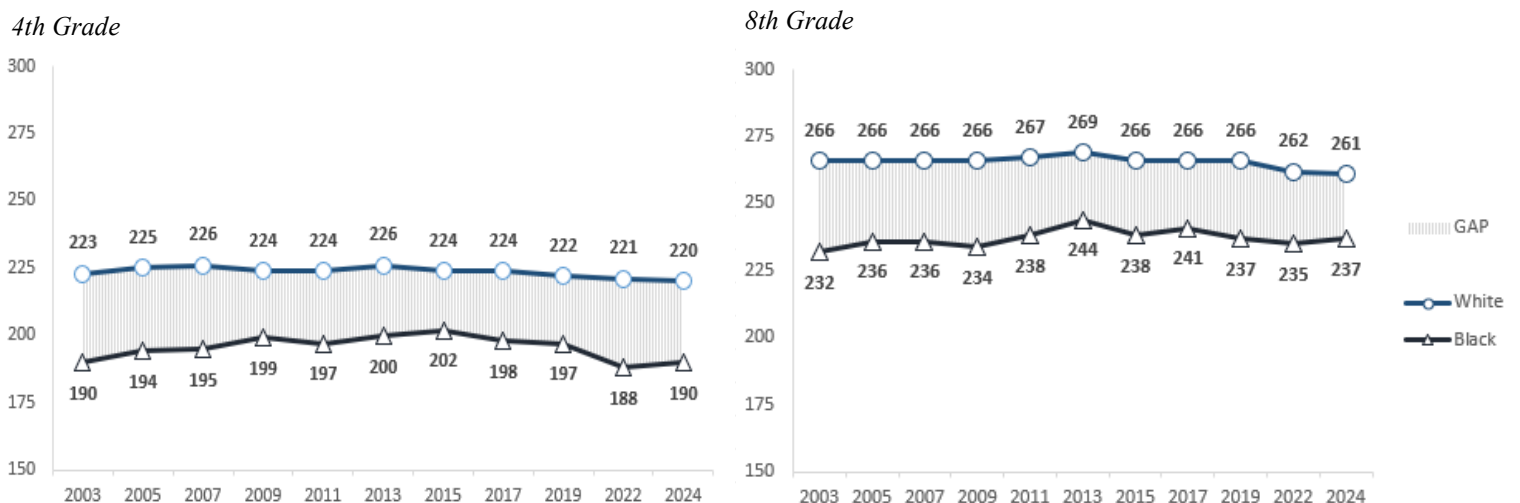


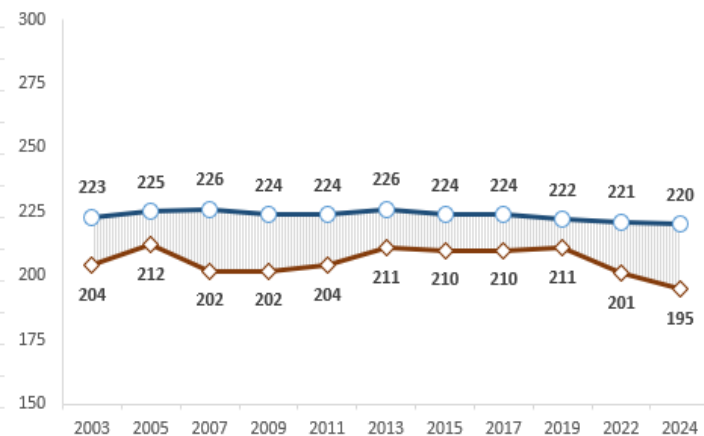
Figure 10 shows a concerning trend among Hispanic students in reading. The gap between them and their White peers have steadily increased due to the larger rate of decline in scale scores among Hispanic students in the last 5 years.

In 2024, 4th grade Hispanic students declined by 6 points in 2024 reading, receiving the lowest score in this category in 21 years. 8th grade Hispanic students declined by 5 points in reading, also receiving the lowest score in 21 years.

The concern is not only among Hispanic students as White students also received scores in 2024 that were the lowest in 21 years in reading. This requires a deeper look into the reasons why decline in reading scores persist as reading proficiency is linked to long-term success beyond the classroom.

Figure 10: Arkansas' NAEP Mean Scale Score for Reading, White and Hispanic, 2003 to 2024

4th Grade



8th Grade

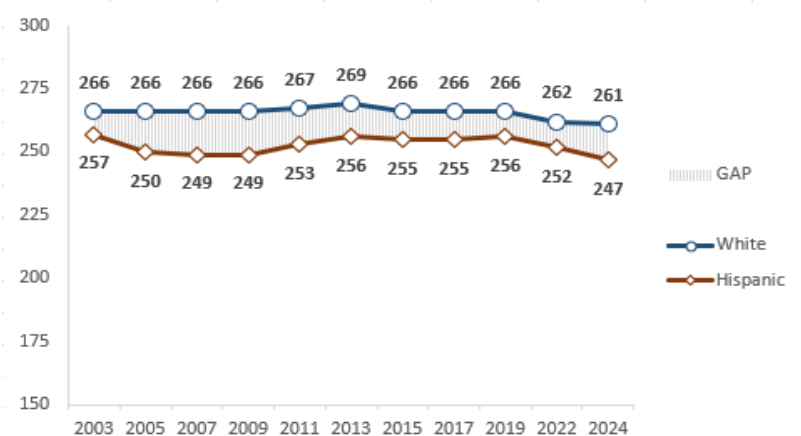
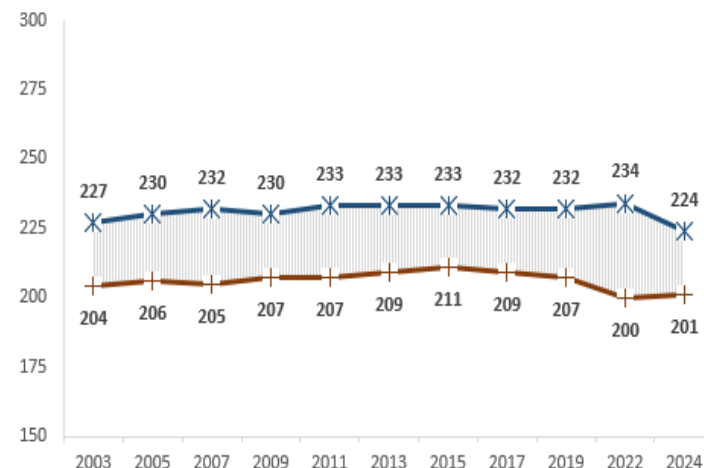


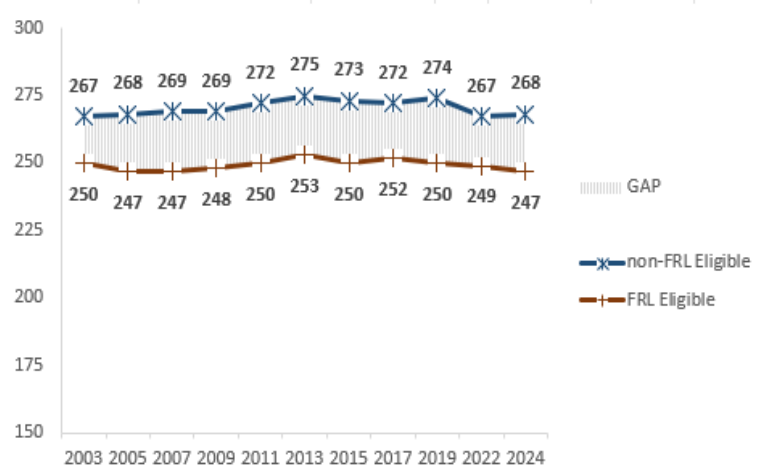
Figure 11 presents the NAEP reading score gaps between students who are eligible for the federal Free/ Reduced Lunch Program and students who are not eligible. The figure again includes students in 4th and 8th grade reading from 2003 to 2024. Like in math, students from more economically advantaged backgrounds score higher in reading than students who face greater economic challenges. Non-FRL Eligible students generally score 24 points higher than FRL Eligible students in 4th grade and 21 points higher in 8th grade. In 2024 there is a decrease in the gap among 4th graders, due to 10 point decline among Non-FRL eligible students paired with a one point increase in performance among FRL eligible students. Among 8th graders however, the gap widened slightly due to a decline in performance among FRL eligible students and 1 point increase in reading score among Non-FRL eligible students.

Figure 11: Arkansas' NAEP Mean Scale Score for Reading, by Free/ Reduced Lunch Eligibility, 2003 to 2024

4th Grade



8th Grade



For more information
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Key Takeaways

Though Arkansas follows a similar trend to the national result, the persistent decline in scores in both math and reading among 4th and 8th grade students is a concern. Whether or not this is a lingering effect of the COVID interruption, questions of the harm the lost of in-class instruction during that time caused, do arise as we consider the performance of students in the state as well as nationally.

The gap between Arkansas and its surrounding states continue to widen in both subjects and grades except for 8th grade reading where they perform similarly.

Score gaps between most student groups have **widened** in 2024 in almost all categories except for 4th grade reading between FRL and Non-FRL Eligible students where the gap narrowed due to a decrease in scores among Non-FRL Eligible students. There is also a narrowing of the gap between Black and White students due to an increase in score among Black students and a slight decrease among White students.

NAEP and ATLAS

In the 2023-24 academic year, a new assessment was administered to Arkansas students: the Arkansas Teaching, Learning & Assessment System (ATLAS). How do the NAEP results compare to the student performance in the ATLAS exams? NAEP is taken by a sample of students in 4th and 8th grades throughout the state every other year, while the ATLAS will be completed annually by all students in grades 3-10. Understanding how the results compare is important for Arkansas students because ATLAS is only comparable within the state, while NAEP is comparable across the country.

Arkansas students are less likely to be proficient in the NAEP exams compared to the ATLAS assessment except in 4th grade math where they are more likely to be proficient in NAEP compared to the ATLAS assessment.

Figure 12 shows that Arkansas students are about 8 percentage points less likely to be proficient in NAEP compared to the ATLAS assessment, again with the exception of 4th grade math. This comparison is helpful in determining how Arkansas students are actually performing so that effective changes can be made to better help Arkansas students succeed in the long term.

Figure 12: Arkansas' 2024 NAEP Percent Proficient and ATLAS Percent Proficient, by Grade and Content Area.

