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COVID-19 recovery in K–2: Positive recovery trends

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Key findings

- Kindergarten achievement levels have remained mostly steady during and following the COVID-19 pandemic.

- In first and second grade, math achievement continues to show modest, incremental recovery, while reading achievement remains stalled with little rebounding to pre-COVID achievement levels.

A large body of research has examined COVID recovery trends in grades 3–8, but less is known about trends in the early grades. NWEA® MAP® Growth™ data reveals that kindergarten test scores were mostly unchanged during the pandemic, while first- and second-grade test scores showed a more sizable COVID-19 drop.

Math trends

Math achievement in K–2 shows little drop in kindergarten and signs of steady recovery in first and second grade. Consistent with the later grades, there is a pattern of incremental reductions in achievement gaps in first and second grade in each year since spring 2021 (when gaps were generally at their largest). Although test scores in first and second grades remain below pre-COVID levels, the size of the gap has narrowed substantially. By spring 2025, the gap for second grade has been reduced by more than half, and in first grade it has been reduced by roughly two thirds. Kindergarten shows a different pattern, with achievement remaining relatively stable over time compared to other grades.

Figure 1. Average K–2 spring math achievement levels, 2017–2025.[1]
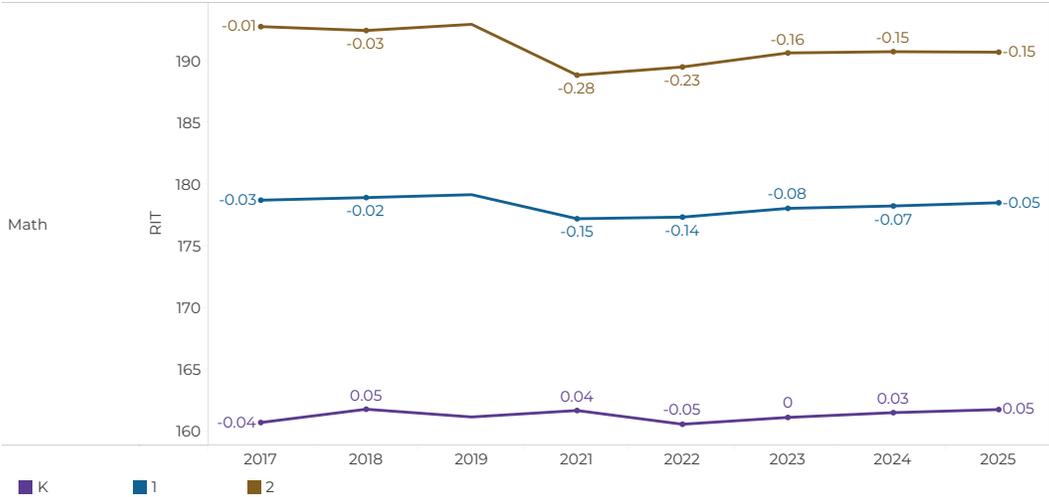
Note. Numbers next to each point reflect the standardized difference in mean achievement compared to the pre-COVID reference year of 2019. Negative values indicate that achievement in that year was lower compared to spring 2019.

How to read Figures 1 and 3

Figure 1 and 3 in this Trends Snapshot come directly from the **Trends Over Time** tab of the MAP Growth National Dashboard. They display standardized differences in mean achievement compared to spring 2019 (the pre-COVID reference year). Negative values indicate scores below 2019 levels. To put this in perspective, the average intervention raises student achievement by about 0.05 standard deviations.

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1   All figures come from the **Trends Over Time** tab of the dashboard and are based on results from over 20 million K–8 students in 30,000 thousand schools.

Progress toward recovery in math extends across groups. While inequities remain, many historically underserved students have regained ground since 2021. Figure 2 illustrates trends over time in second-grade math achievement, disaggregated by school-poverty level (top panel) and race/ethnicity (bottom panel).[2]

On average, second-grade math achievement gaps narrowed by 0.13 SDs between spring 2021 and spring 2025 (from −0.28 to −0.15). Recovery was larger for several historically underserved groups, including students in high-poverty schools (0.19 SDs), Black students (0.19 SDs), and Hispanic students (0.21 SDs). Although these gains are encouraging, achievement levels for these groups remain well below national prepandemic averages, and overall gaps persist.

Figure 2. Average second-grade math reading achievement levels, 2017–2025, by school-poverty level (upper panel) and race (lower panel)
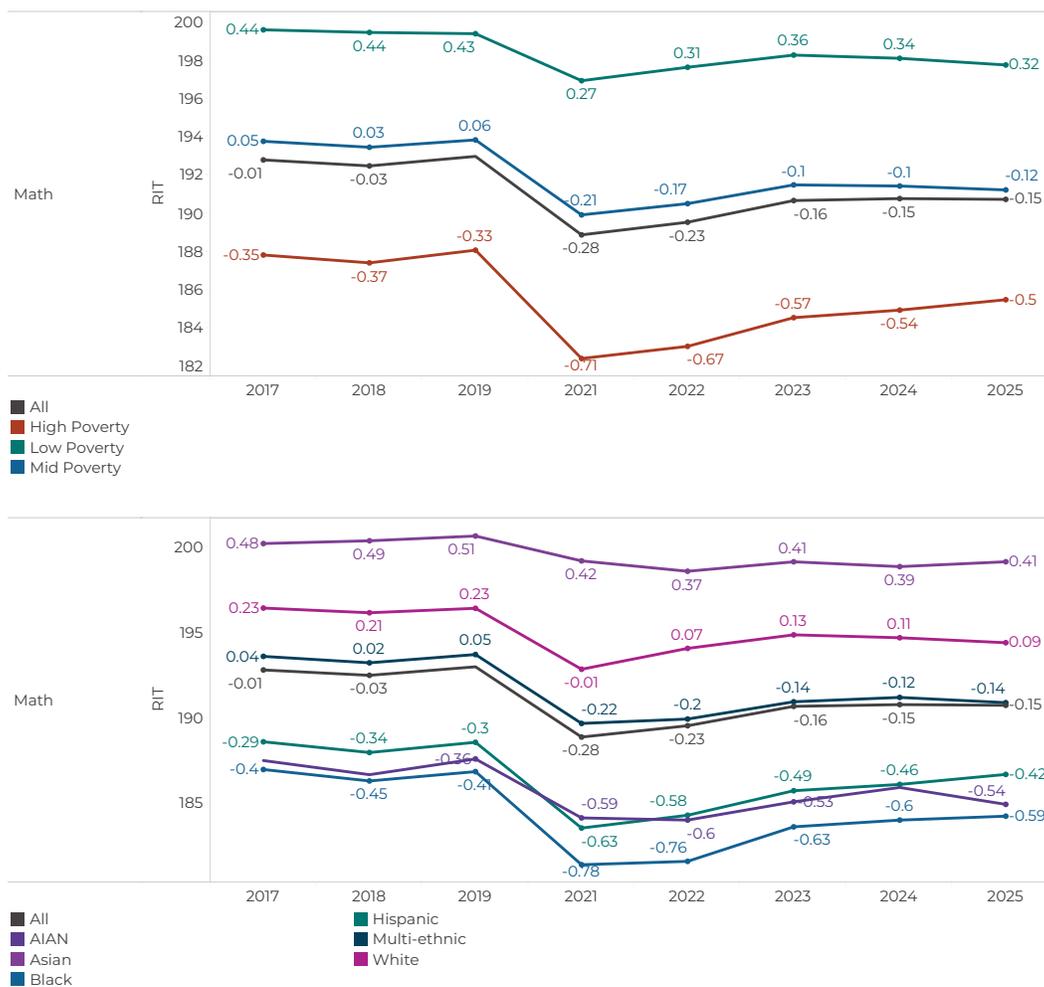
Note. Numbers next to each point reflect the standardized difference in mean achievement compared to overall national averages in spring 2019.

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2   We classified schools into poverty levels based on the percentage of students with free or reduced price lunch (FRPL) eligibility reported in the 2023–2024 Common Core of Data (CCD). Low-poverty schools had less than or equal to 25% FRPL eligibility, mid-poverty schools had greater than 25% and less than or equal to 75% FRPL eligibility, and high-poverty schools had greater than 75% FRPL eligibility.

Reading trends

Reading recovery in the early grades has been uneven. While kindergarten reading achievement has remained relatively stable since the pandemic, first- and second-grade reading scores show little evidence of recovery.

Patterns are broadly consistent across student groups: no subgroup shows evidence of strong rebound in reading, and stagnation is evident regardless of race/ethnicity or school poverty level. Although initial losses were smaller than in math, recovery has stalled, and shortfalls in reading are now larger than or comparable to math in some grades.

Figure 3. Average K–2 spring reading achievement levels, 2017–2025.
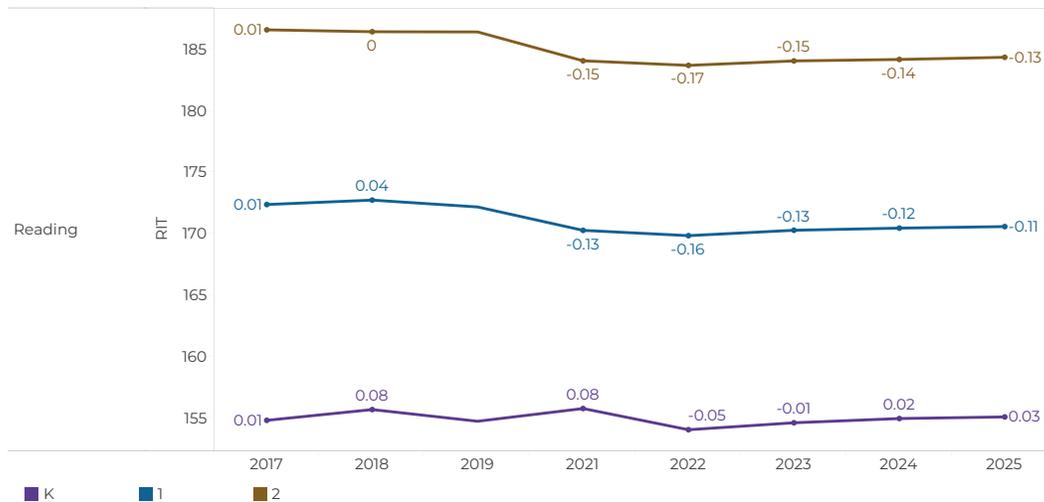
Note. Numbers next to each point reflect the standardized difference in mean achievement compared to the pre-COVID reference year of 2019, with negative values indicate that achievement in that year was lower compared to spring 2019.

Summary and significance

By spring 2025, achievement patterns in first and second grades closely resemble those observed in upper elementary and middle school (Lewis & Kuhfeld, 2025). In math, gaps for first- and second-graders have narrowed modestly since their pandemic low point but remain below pre-COVID levels. In reading, achievement remains stalled, with little evidence of recovery. The magnitude of remaining gaps in first and second grade is broadly comparable to those seen among older students in both subjects. Kindergarten stands apart from this pattern, showing minimal initial declines and little remaining gap.

The consistency of these patterns across grade levels is notable given students' differing exposure to pandemic-related disruptions. Students in first and second grade in spring 2025 were preschool-aged during the most disruptive periods of spring 2020 and spring 2021. Yet their achievement remains below prepandemic benchmarks in ways that mirror older cohorts who experienced sustained instructional disruption. This suggests that current achievement shortfalls are not solely the result of disruptions to students' own early schooling, but also reflect broader, longer-lasting disruptions to education systems that continue to shape learning trajectories.

Together, these findings underscore the depth and persistence of unfinished learning. The widespread stagnation in reading and uneven recovery in math point to system-level challenges that extend beyond a single cohort or moment of disruption. Addressing these challenges will require sustained attention to foundational skills across grades, rather than assuming that recovery will occur naturally as newer cohorts move through the system.

Looking ahead

District and state leaders may wish to ask:

- What system-level conditions (e.g., staffing stability, access to high-quality instructional materials, instructional coherence) may be contributing to continued stagnation in reading outcomes?

- How are recovery efforts addressing persistent shortfalls in reading that appear across grade levels, including among students who were not yet in formal schooling during the height of the pandemic?

- Given that math recovery is evident across grades while reading recovery is not, what differences in supports, instructional focus, or accountability may help explain these divergent trends?

Trend Snapshots highlight key insights from the MAP Growth National Dashboard. They are designed to provide timely and accessible information that district and state leaders can use to interpret national patterns, frame their own local results in context, and guide recovery strategies.

Authors

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