

The road to academic recovery: students are learning, but older students' recovery needs attention

THE RESULTS

- In nearly all grades, student achievement gains fell short of pre-pandemic trends in 2022–23, which stalled progress toward pandemic recovery. There was a bright spot in the results, however: third graders' gains in 2022–23 exceeded pre-COVID trends in both reading and math, while fourth graders were close to meeting pre-COVID trends in reading but were 7% below in math.
- The average student will need interventions and support equivalent to 4.1 additional months of schooling to catch up in reading and 4.5 additional months to catch up in math. Middle school students will require more additional instruction than elementary school students.
- Comparing across race/ethnicity student groups, achievement gains for all students lagged pre-pandemic trends in 2022–23. Marginalized students remain the furthest from recovery.

The latest NWEA analysis on student learning from grades 3–8 shows that academic recovery has stalled for older learners in the 2022–23 school year. After a slight rebound in the 2021–22 school year, the distance widened against pre-pandemic trends in the 2022–23 school year. Middle school students are further behind than younger students. For all grades, it will take a concentrated and coordinated response from schools to help students reach the achievement levels of their pre-pandemic peers.

This is, of course, not an ideal result. The modest rebounding observed in spring 2022 and fall 2022 was not sustained over the 2022–23 school year. Students were learning and growing during last school year, but at rates that fell short of pre-pandemic trends. While the data doesn't explain the cause of the sluggish growth, it is perhaps due to ongoing challenges in selecting and scaling evidence-based interventions, and the relatively short time that has elapsed since the most severe pandemic disruptions—especially given the timelines historically necessary for dramatic improvements in student outcomes. Considerable and concentrated efforts at local, state, and federal levels will be required to produce above-average levels of growth necessary to reach full recovery.

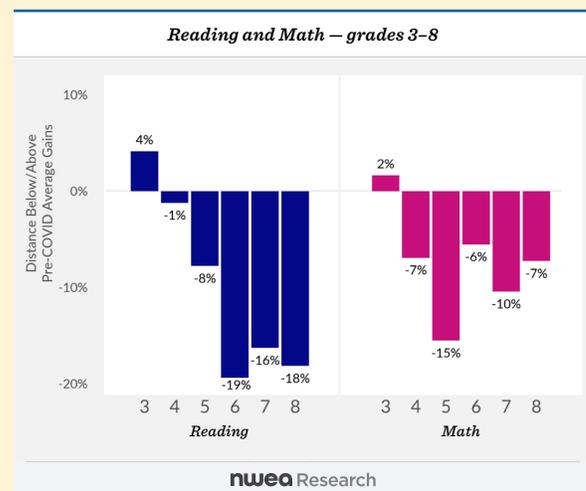
The data

NWEA researchers analyzed MAP Growth scores for more than 6.7 million students in grades 3–8 in about 20,000 public schools across the country. They looked at achievement and growth trends for students in school during the pandemic years, from 2020–21 through 2022–23. The researchers then compared the performance of those students with that of students in school from 2016–17 to 2018–19.

Stalled progress

Overall, progress toward full recovery has stalled. Students are still growing academically, but not at the same pace as before the pandemic. Students have a lot of ground to make up to be back at the same levels before the school closures that started in March 2020. Thus, with slower progress, student achievement continues to lag far behind pre-pandemic trends.

Figure 1. Fall-to-spring achievement gains during 2022–23 relative to pre-COVID trends



Note: The bars depict the percentage difference between 2022–23 fall-to-spring growth and pre-COVID growth trends. These relative gains ratios were calculated by taking the average fall-to-spring change in RIT score for the COVID sample and dividing by the average for the pre-COVID sample. The pre-COVID baseline was the aggregate fall-to-spring growth across the 2016–17, 2017–18, and 2018–19 school years.

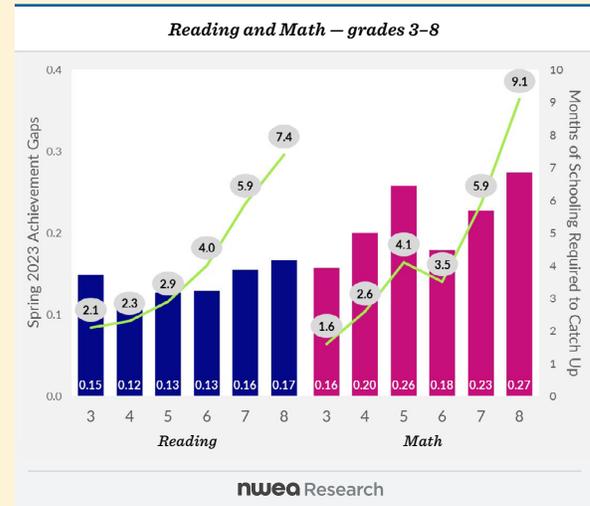
There is good news to report. Growth trends in 2022–23 for the youngest students exceeded or mirrored the growth trends of previous cohorts. In reading, third graders’ gains exceeded typical growth by 4%, and fourth grade growth rates slipped slightly by 1%. In math, third graders rose by 2%, while fourth graders’ gains lagged pre-pandemic trends by 7% (Figure 1). Unfortunately, middle school achievement gains lagged pre-pandemic trends, falling short of pre-pandemic averages by 16–19% in reading and by 6–10% in math.

NWEA researchers estimate that the average eighth-grader in the 2022–23 will need an extra 9.1 months of learning in math to catch up to pre-pandemic achievement levels and 7.4 months of learning in reading (Figure 2). In other words, when these students enter their freshman year of high school, they will need to accomplish almost five years of learning during their four years of high school. Seventh graders will need an estimated 5.9 months of school to recover learning losses in both subjects, and sixth graders will require 4.0 additional months in reading and 3.5 months in math.

Even with their comparable growth trends in 2022–23, third and fourth graders still have significant levels of unfinished learning and will require between 1.6 and 2.6 months of extra instruction to meet pre-pandemic trends.

The research also found that the need for additional intervention was greater for marginalized students, especially in middle school. In math, Black and Hispanic middle schoolers will need more months in math (6.2 and 6.4, respectively) than Asian and White students (4.3 months and 5.3 months, respectively). In reading, White, Black, and Hispanic students need additional time (4.9 months, 4.9 months, and 6.7 months) than Asian students (1.4 months). The disparities were not as stark at the elementary school level.

Figure 2. Spring 2023 achievement gaps¹ and equivalent additional months of schooling required to catch up to pre-COVID achievement levels

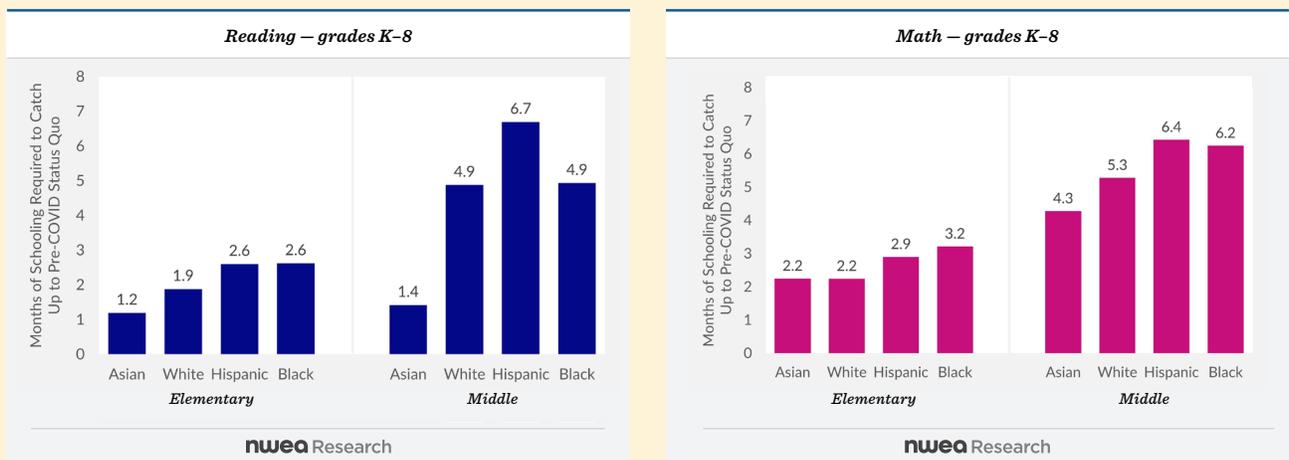


Note: The bars (scaled to the left axis) depict the magnitude of spring 2023 achievement gaps for reading (in blue) and math (in magenta). The values at the bottom of each bar are the standardized mean differences between the COVID and pre-COVID sample for each cohort. The green line and accompanying values in gray ovals (scaled to the right axis) capture months of schooling required to close achievement gaps and catch up to pre-COVID achievement levels. Estimates were calculated by taking the mean score differences between the COVID and pre-COVID samples and dividing by the average pre-COVID fall-to-spring growth rates.

After seeing modest signs of rebounding across 2021–22 and into fall 2022, this data shows that significant levels of unfinished learning remain and students will need sustained support in the coming years to help get where they need to be.

This brief provides a summary of the key findings from the NWEA research team. To explore this research in-depth, please read the full [research report](#).

Figure 3. Equivalent months of schooling required to catch up to pre-COVID achievement by race/ethnicity



Note: The bars depict months of schooling required to catch up to pre-COVID achievement levels of achievement, broken down by subject, school level, and racial/ethnic group. Estimates were calculated by taking the mean score difference between the COVID and pre-COVID sample of each grade and group, dividing by the average rate of pre-COVID fall-to-spring growth for that group, and averaging across each grade band.

¹ NWEA researchers use the term “achievement gaps” to refer to differences between the sample of students in school during COVID-19 (2020–21 through 2022–23) and the sample of students in school during non-COVID-19 years (2016–17 through 2018–19).

RECOMMENDATIONS

Since the dramatic learning disruptions of 2020 and 2021, districts and schools have dealt with the direct repercussions of the pandemic compounded by [staffing challenges](#), [intervention implementation delays](#), and [political debates](#). In this context, recovery efforts have been understandably slow to start and scale, and implementation challenges abound. Addressing the gaps from the findings detailed above will take sizable and sustained resources and efforts in the coming years, from all levels of the education ecosystem.

The expiration of federal Elementary and Secondary School Emergency Relief (ESSER) funds is on the horizon and presents a significant roadblock to full recovery. ESSER resources have been essential in supporting initial [recovery efforts](#), but federal policymakers must do more to ensure that the extra funds continue. The scale of the recovery challenge is enormous and ongoing, as documented here and [replicated elsewhere](#) by other researchers using different assessments. Investment must be on a similar scale to support students in meeting and exceeding their growth potential.

At the state and district level, we continue to urge policymakers to use local data on student progress to identify unique needs and deploy evidence-based interventions to match. The same is true for parents and families. While educators see the effects of the pandemic in their classrooms every day, a recent [Pew poll](#) found that over half of parents believed the pandemic had only a temporary effect on their child's

education. Closing that “perception gap” between schools and families would aid district recovery efforts that in too many places are [falling short](#) of their goals in terms of reach, intensity, and impact.

More specifically, we urge policy makers and education leaders to:

- **Use local data to guide recovery and investing in what works.** States and districts can set up [processes and tools](#) that provide capacity to schools when gathering data and tracking the implementation of interventions.
- **Expand instructional time by deploying evidence-based interventions and programs to the students who still need additional support.** Interventions and programs must be scaled to the size of the challenge, and students in need of additional support may require multiple interventions to fully recover from the impacts of pandemic. State and district leaders can work with schools to develop policies and practices that ensure schools are able to [implement interventions efficiently and effectively](#).
- **Communicate the importance of academic recovery, sharing timely and relevant information with families.** States, districts and schools can provide families with timely information about their [child's progress and achievement compared to grade-level standards](#) and resources that families can use to support learning recovery at home.

To learn more, please visit the [NWEA Policy and Advocacy site](#).

We welcome the chance to hear your ideas for fueling more student growth and helping students make a full recovery. Contact [Katie Carroll](#), Senior Director of Policy and Engagement.

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