

National Data Quantifies Impact of COVID Learning Loss; Raises Questions About At-Home Testing

Data from over 900 schools nationwide offers snapshot of how school shutdowns are impacting student achievement at the start of the 2020-21 school year

.....

Kristen Huff, Ed.D. is Vice President, Assessment and Research, at Curriculum Associates. Prior to this role, she served as the Senior Fellow for the New York State Department of Education. Dr. Huff has deep expertise in K-12 large-scale assessment and has co-chaired the National Council on Measurement in Education (NCME) Task Force on Classroom Assessment since 2016.

.....

OVERVIEW

According to an analysis by Curriculum Associates, which serves 30% of K-8 students in US, results of the i-Ready Diagnostic this fall for in-school testing suggest that the effects of COVID learning loss – while evident – may not be as precipitous as observers feared, especially in reading. The analysis, which suggests improved student outcomes for at-home test takers, also raises important questions about at-home testing.

EXECUTIVE SUMMARY

Overall, diagnostic testing of students returning to school in-person (whether hybrid or full-time) suggests that last Spring’s school shutdowns negatively affected students across the board, translating into a greater number of students entering school this fall who aren’t ready for grade-level work. But our findings also suggest that students in grades one through five who sat for assessments in math and reading at-home this Fall markedly outperformed both their peers who returned to school, and historic trends. Exactly why, however, remains a mystery.

- When we look at the data from in-school testing, which are consistent with typical in-school testing environments, we see that more students entering school this fall are unprepared for grade-level work (testing two or more grade levels below their current grade). These differences are especially stark across grades two through four, and are worse in math than in reading.
- Typically, 19 percent of second graders show up in the Fall at least two grade levels below in reading. In 2020, that rose to 25 percent, six percentage points higher than the historical average.

…❖ The data also show that a full 30 percent of second graders are two or more grade levels below below in math, 10 percentage points higher than the historical average.

- Data from students who took i-Ready in school suggests that while such a “COVID slide” likely occurred, it may not be as precipitous as observers feared, especially in reading.
- Curiously, students who took diagnostic assessments at home in the Fall actually showed an improvement over previous years.
 - …❖ Whether these students learned more than others while at home — or whether they received extra support from parents or others — remains unanswered by the data.
 - …❖ More so than a beneficial impact of home-based schooling, the data likely reflect **well-documented** concerns about testing at home, even for low-stakes, diagnostic assessments.

FINDINGS

The Covid Slide

A major concern among educators, parents, and policymakers is the degree to which school interruptions last Spring may have precipitated a “COVID slide,” similar to a well-documented **Summer slide** or summer learning loss in which students, especially in at-risk groups, lose precious academic progress when not attending in-person classes and benefiting from other in-school affordances.

In general, researchers have found that **achievement scores** drop by one month’s worth of school-year learning each summer, more in math than in reading. The slide is typically greater at higher grade levels.

Data from students who took i-Ready tests suggests that while such a “COVID slide” likely occurred, it may not be as precipitous as observers feared, especially in reading.

Students lost more ground in Math than in Reading during COVID closures. Other details from students who tested in school:

- More students in higher minority and higher poverty schools tend to be two or more grade levels below this Fall than their peers in lower minority, lower poverty schools.
- Suburban schools tend to have the lowest percentage of students two or more grade levels below.
- Across all demographic groups, locales, and median income categories, the grades with the biggest increases in students two or more grade levels below in both reading and math are grades, two, three, and four compared to the historical average.¹

Research suggests that the slide exacerbated already large gaps in readiness:

- In grade two, a full 25 percent of students who tested in school were two or more grade levels below in reading, a six percentage point rise from the 19 percent historical average.
- In grade three, 30 percent of students tested two or more grade levels below in reading, a five percentage point rise from the 25 percent historical average.

¹The historical comparison sample is based on a rolling average of Fall test scores across 2017, 2018, and 2019, for any student in the same schools analyzed in Fall 2020.

- In math, the deficits were even worse, with 30 percent of second-graders and 33 percent of third graders who tested in school performing two or more grade levels below – an increase of 10 and nine percentage points compared to historical trend, respectively.

What to Make of the At-Home Advantage?

We cannot confidently explain why the data suggests that students who tested outside of school actually performed better than historical average in both reading and math for most grades. A few details:

- Among second graders, 18 percent of students were reading two or more grade levels below their peers, a six percentage point improvement from historical data, which shows that typically 24 percent of students show up in the fall reading two or more grade levels below.
- In math, a similar pattern emerged, with at-home test takers performing better than historical averages: 22.5 percent of second graders, for example, performed two or more grade levels below their chronological grade, an almost five percentage point improvement from the typical 27 percent.
- Increased scores held across all demographic, location, and income levels.

CONSIDERATIONS

- Generally speaking, prior to 2020, i-Ready test-takers tended to mirror the national K-8 population across demographic, location, and income levels, with i-Ready test-takers skewing slightly towards higher minority and higher poverty schools.
- The reasons for improvements in scores for students assessed at home are unclear and open to interpretation.
- Demographic categories and school locale were based on NCES school level codes, and median income was based on the ZIP code in which the school is located.
- Schools that opened and tested students in person have, historically, performed a bit higher than average than the national iReady population. This may be because schools that actually opened for instruction in Fall 2020 were more well-resourced or in areas that could more effectively reduce infection and successfully open schools.

ABOUT CURRICULUM ASSOCIATES

Founded in 1969, Curriculum Associates designs research-based print and online instructional materials, screens and assessments, and data management tools. The company's products and outstanding customer service provide teachers and administrators with the resources necessary for teaching diverse student populations and fostering learning for all students.

Media contact: press@cainc.com