

9-1-2023

COVID-19 and Learning Loss at Kalamazoo Public Schools

Randall W. Eberts

W.E. Upjohn Institute for Employment Research, eberts@upjohn.org

Upjohn Author(s) ORCID Identifier:

 <https://orcid.org/0000-0002-9711-5466>

Follow this and additional works at: https://research.upjohn.org/up_policybriefs



Part of the [Educational Assessment, Evaluation, and Research Commons](#), and the [Elementary Education Commons](#)

Citation

Eberts, Randall W. 2023. "COVID-19 and Learning Loss at Kalamazoo Public Schools." Policy and Research Brief. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/pb2023-61>

This title is brought to you by the Upjohn Institute. For more information, please contact repository@upjohn.org.

POLICY BRIEF

COVID-19 and Learning Loss at Kalamazoo Public Schools

Randall W. Eberts

BRIEF HIGHLIGHTS

- *I examine enrollment and test-score changes in Kalamazoo Public Schools in the school years after the COVID pandemic began.*
- *While enrollment continued to fall through at least the 2021–2022 school year, test scores have begun to recover from their initial decline.*
- *Students in elementary grades have shown stronger test-score recovery than have students in middle-school grades.*
- *Scores have become more variable near the bottom, suggesting recovery has been uneven within a particular grade.*
- *Although the worst may be behind, the road to recovery for student learning will likely be long.*

For additional details, see the full working paper at https://research.upjohn.org/up_workingpapers/385/.

The COVID-19 pandemic inflicted massive disruptions on all aspects of daily life, not least of which was the education of K–12 students. It is accepted wisdom among many educational researchers that students need face-to-face instruction from certified teachers in order to flourish. But because students in many districts were forced to stay home from school, they were not receiving the same level of instruction they had been accustomed to. Students in the Kalamazoo Public Schools (KPS) District were no exception. Their school year was abruptly interrupted on March 16, 2020, when Gov. Gretchen Whitmer announced that all schools in the state would be closed until April 5 because of the COVID-19 outbreak. Then, on April 2—three days before schools were to reopen under the initial order—the governor extended Michigan’s school closures through the end of the regular school year, citing the spread of the virus. KPS schools were hardly alone in being affected by such an order: 77 percent of public schools nationwide transitioned to online learning midway through the spring semester of 2020.

As COVID-19 became more widespread and virulent, the KPS school board and administrators closed local schools for the 2020–2021 school year. The closure of KPS proved controversial, since not all schools in the state followed suit.

Drawing upon the Upjohn Institute’s Community Data System—a collaborative effort to track child development and success from birth to early adulthood—I investigate how these pandemic-related school closures affected KPS enrollment, as well as student achievement as captured by standardized test scores. I find that student enrollment declined for at least two years after the pandemic struck, marking the first time KPS has had consecutive yearly enrollment losses since the beginning of the Kalamazoo Promise, implemented in 2006. Although student achievement fell during the first full year of remote schooling, test scores rebounded the following year, when KPS schools had reopened. Nonetheless, the typical achievement gains were not as high as they had been in the school year prior to the pandemic. Even so, these gains still were comparatively stronger among the lower grades, suggesting that test scores of elementary-school students were more resilient than those of middle-school students during this period. However, the test scores did not change uniformly; I show that test scores were more variable at the bottom of the distribution than near the top, and that this variability increased in the year following school closure.

A Closer Look at KPS Before and After the Pandemic

I focus on KPS in three periods: during 1) the prepandemic years, 2) the full school-closure year (2020–2021; standardized tests were not administered in the spring of 2020), and 3) the post-school-closure year. Numerous studies have used various “national” samples to examine changes over this period in enrollment and test taking, with the latter area, test taking, typically based on Northwest Evaluation Association (NWEA) math test scores for students in grades 3–8. I investigate the same outcomes for KPS, making national comparisons when possible, and also covering changes by race and ethnicity.

COVID-19 and Learning Loss at Kalamazoo Public Schools

The number of students taking the NWEA math test dropped dramatically during the year that schools were closed.

Besides looking at overall trends in enrollment and test taking, I consider two specific research questions:

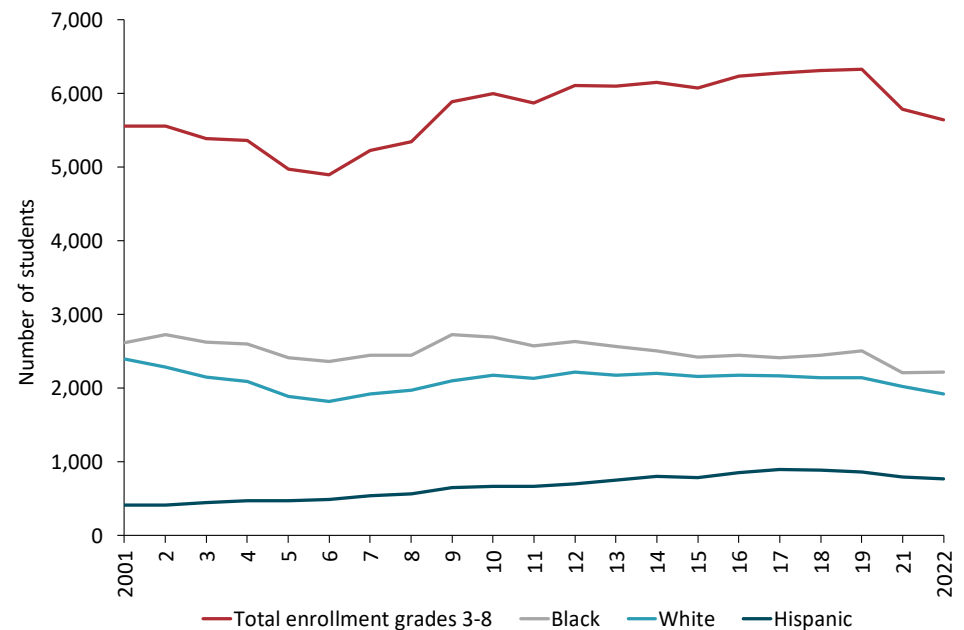
1. How do achievement gains in the pandemic 2020–2021 school year compare to prepandemic and post-school-closure trends?
2. To what extent have student math test scores become more variable because of the COVID-19 pandemic?

Overall Trends in Enrollment and Test Taking

KPS enrollment dropped during and since the pandemic; relative to the 2018–2019 school year, the student count had fallen by more than 10 percent by 2021–2022, with declines occurring in each year of the pandemic. The cumulative decline is greater than anything the district has experienced since the advent 17 years ago of the Kalamazoo Promise, a universal scholarship for KPS graduates to attend nearly any of Michigan’s postsecondary institutions. However, enrollment did not drop across all racial groups between 2020–2021 and 2021–2022—declines over this 12-month period were concentrated among White and Hispanic students, while Black student enrollment actually increased slightly, although not enough to recover to prepandemic levels.

Test taking also declined, but has recovered more than has enrollment. The number of students taking the NWEA math test dropped dramatically during the year that schools were closed. In the prepandemic school year (2018–2019), 5,472 KPS students in grades 3 through 8 took the NWEA math test. In 2020–2021, when schools were closed, 4,130 students took the NWEA math test, presumably at home, and the next year (2021–2022),

Figure 1 KPS Spring Enrollment in Grades 3 through 8 by Race/Ethnicity since 2001



NOTE: The year 2020 is skipped on the x-axis scale because the school year ended abruptly that March with the outbreak of COVID-19. The Kalamazoo Promise was announced in November 2005 and implemented in 2006. It is a scholarship open to all resident graduates of Kalamazoo Public Schools, with the amount paid depending on the grade at which a student enrolls in KPS and lives within its borders. The Promise pays for the tuition and fees at any of the public colleges and universities, community colleges, and eligible apprenticeships and skilled trades programs in Michigan. Later, select private liberal arts colleges in Michigan were added to the list of Michigan postsecondary institutions.

SOURCE: Author’s calculations of the Community Data System.

Students of color were overrepresented in the bottom of the test-score distribution, while White students were overrepresented at the top.

when schools reopened and students were back in the classroom, 4,728 students took the test. That marked an increase of 598 test takers, even as 144 fewer students in these grades were enrolled. Consequently, the share of students taking the test in 2021–2022 reached 84 percent—below the share in 2018–2019 but above the average share since KPS began administering the NWEA test in 2014.

KPS Achievement Gains and Losses Since the Pandemic

I next turn to how achievement gains (measuring the difference between the average fall test scores and the average spring test scores within a school year) evolved over the three years around the pandemic. To summarize, I find that achievement gains are higher in the lower elementary grades than in the upper middle-school grades. After falling during the full year of school closure, achievement gains rebounded after KPS schools reopened, although they were still smaller than in the prepandemic school year. These patterns were more muted for students in elementary grades, suggesting their achievement was more resilient than that of middle-school students.

Score changes during the pandemic also varied based on students' initial position in the score distribution. In particular, test scores varied more widely near the bottom of the distribution than near the top, a pattern also found in national NWEA data. As well, scores became more variable in 2021–2022, the school year following the school-closure year, than they had been in the year immediately preceding it, suggesting that recovery was uneven.

National Comparisons

On average, KPS—a district with a relatively high share of low-income students—did not perform as well on NWEA math tests as students had nationally in the three school years considered in this study. However, KPS students appear to have been *more resilient*, as their average achievement gains outpaced those of students nationally.

The first of these two findings may not be surprising. Students of color are more likely to be overrepresented in the lower part of the standardized test-score distribution, and White students in the higher part of the distribution. This relates, in part, to socioeconomic status, in that a higher percentage of students in poverty have low test scores. The second finding, about resilience, is more novel. I find that the achievement gains of KPS students are at least as high, if not higher, than the gains of their national counterparts. This is surprising, since we would not expect achievement gains to be higher in the face of higher poverty.

Remaining Challenges and Conclusion

KPS students faced several challenges during the pandemic and the resulting school closures, which lasted for more than a full school year. Although the district is part of a medium-sized city, it faces many of the same challenges larger urban centers experience, including, on the part of students' families, a lack of access to technology, lack of access to reliable Internet, and lack of adequate resources. Indeed, a major challenge faced by many low-income students was an inability to regularly access remote instruction through a virtual platform. It required philanthropic efforts to coordinate and pool resources with KPS in order to expand Internet access for these families. Another issue that emerged was the variability in home instruction. Parents in some families are well educated, well resourced, and able to provide support for home learning, but parents in other families are not. Therefore, students from families with well-prepared parents may handle remote schooling better than those students with less-well-prepared parents.

These challenges have caused many students to fall behind in their coursework, at the same time that the remote learning environment has reduced opportunities for students to receive direct instruction. Students are not enrolled in school at the same levels (in

COVID-19 and Learning Loss at Kalamazoo Public Schools

Lower grades exhibited greater resilience than upper grades, even seeing increases in achievement gains on the NWEA math test.

terms of numbers) as they were before the pandemic, their test-taking abilities have declined, and their test scores have fallen. In addition, many students have encountered additional strain from having inadequate access to health care, experiencing parental job loss, or even suffering COVID-related deaths in their families. Although the district has implemented several programs to address these challenges, it will take time and effort to mitigate the impact of the pandemic on student learning.

Randall W. Eberts is a senior researcher and immediate past president of the Upjohn Institute.



W.E. Upjohn Institute for
Employment Research



@UpjohnInstitute

WEBSITE

upjohn.org