

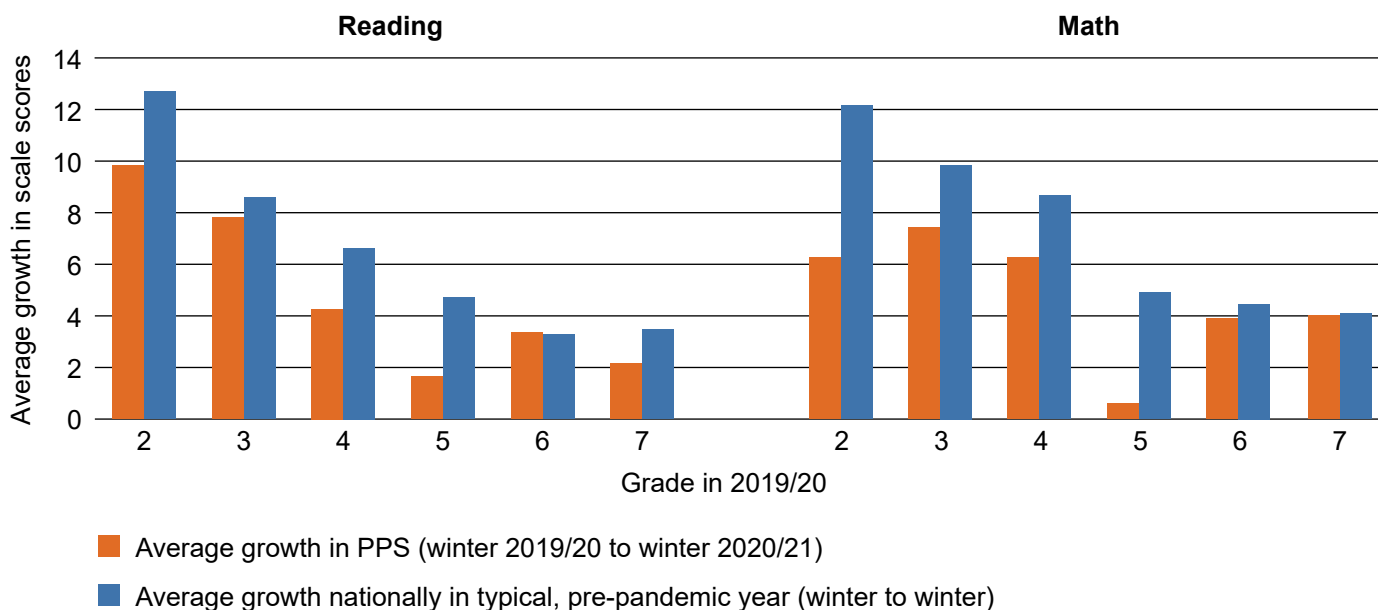
# FACTSheet

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## Test Scores, Grades, and Student Engagement During the COVID-19 Pandemic

The COVID-19 pandemic caused dramatic disruptions in the education system and pushed many school districts to shift abruptly to remote instruction at the end of the 2019/20 school year and much of the 2020/21 school year. These disruptions have raised concerns nationally about declines in student achievement<sup>1,2</sup> and about student participation and engagement in their courses during this period of remote learning.<sup>3</sup> This fact sheet examines what happened to students' test scores and grades in Pittsburgh Public Schools (PPS) during this time and how the changes in test scores compare to typical pre-pandemic growth nationally. It also describes which groups of students experienced larger declines in test scores and grades and how that relates to their absences and use of the district's learning management system (LMS) during remote instruction.

**Pittsburgh students experienced achievement growth in reading and math during remote instruction, but this growth was less than expected in a typical, pre-pandemic year in most grade levels**



Source: NWEA Measures of Academic Progress (MAP) test winter 2019/20 and winter 2020/21. NWEA 2020 MAP growth achievement status and growth norms tables for students and schools.

Note: We calculated growth for individual students from winter 2019/20 to winter 2020/21 and report average growth for students by their grades in the baseline year (2019/20). We compare this to the average growth nationally from pre-pandemic achievement norms from NWEA. Students had to take the test in both 2019/20 and 2020/21 to be included in the sample. We used test score data from grades 2–8 because the rates of test participation were less than 80 percent in other grades.

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## How did student achievement change in Pittsburgh during remote instruction?

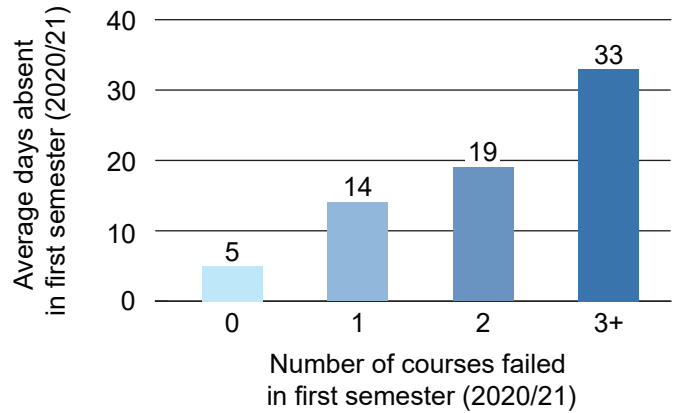


During the first year of the pandemic while instruction was fully remote, scale scores on the NWEA Measures of Academic Progress (MAP) assessment grew for PPS students in grades 2–7 in 2019/20. This indicates students learned in both math and reading during remote instruction. However, they experienced less test score growth than an average student did nationally in a typical pre-pandemic year. Specifically, students in grades 2–7 in 2019/20 experienced, on average, about two-thirds of the typical growth in math and three-quarters of the typical growth in reading. The learning lags were largest in elementary grades.

At the same time test scores were lagging for elementary school students, course failures increased dramatically among middle and high school students in Pittsburgh, jeopardizing students' likelihood of graduating:

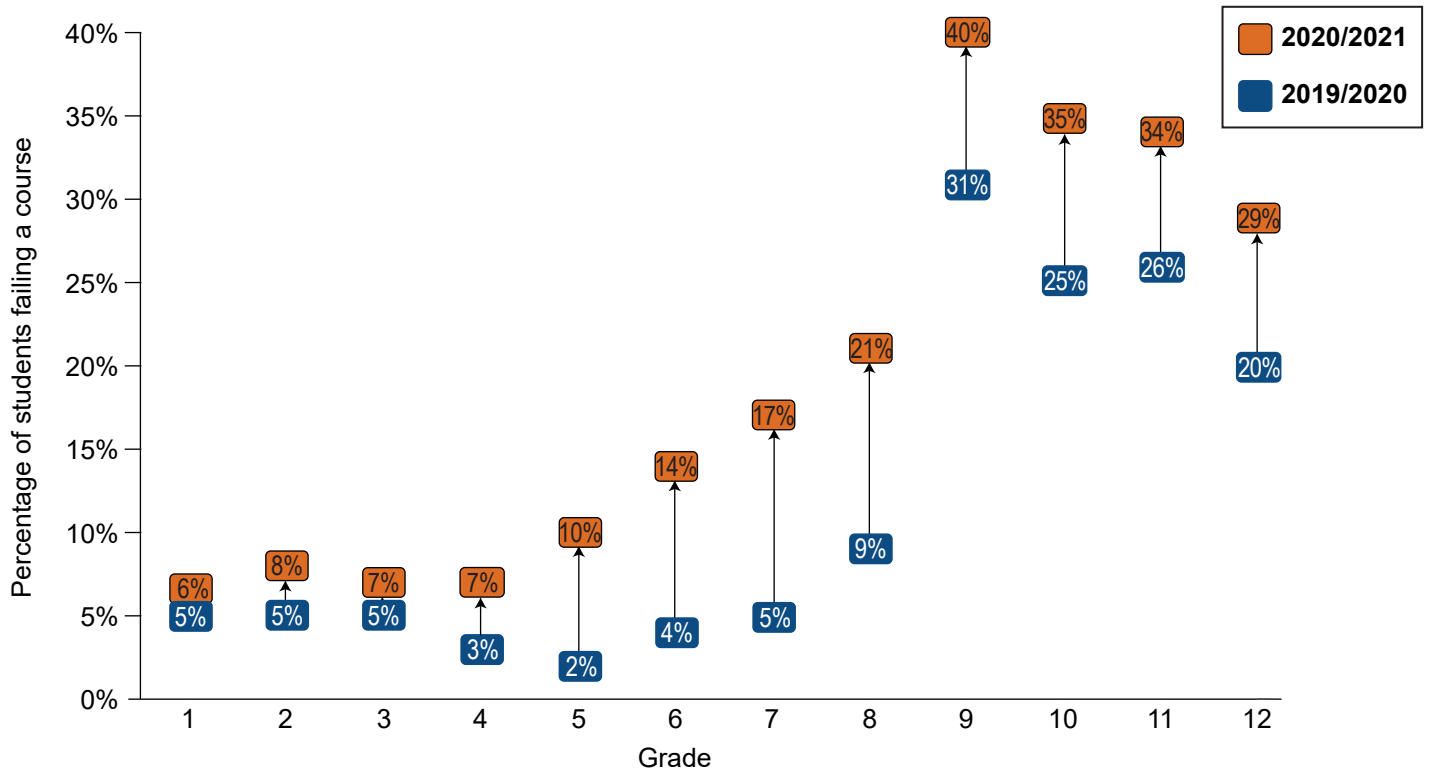
Course failures are strongly linked to high levels of absenteeism. In the first semester of 2020/21, PPS students who failed three or more courses were absent 33 days on average, whereas those who failed no course were absent 5 days on average:

## During remote instruction in Pittsburgh, students failing more classes had many more absences on average



Source: PPS administrative data, 2020/21.

## Grades 5-12 experienced the largest increases in the percentage of students failing at least one course in the first semester of 2020/21, compared to the first semester of 2019/20



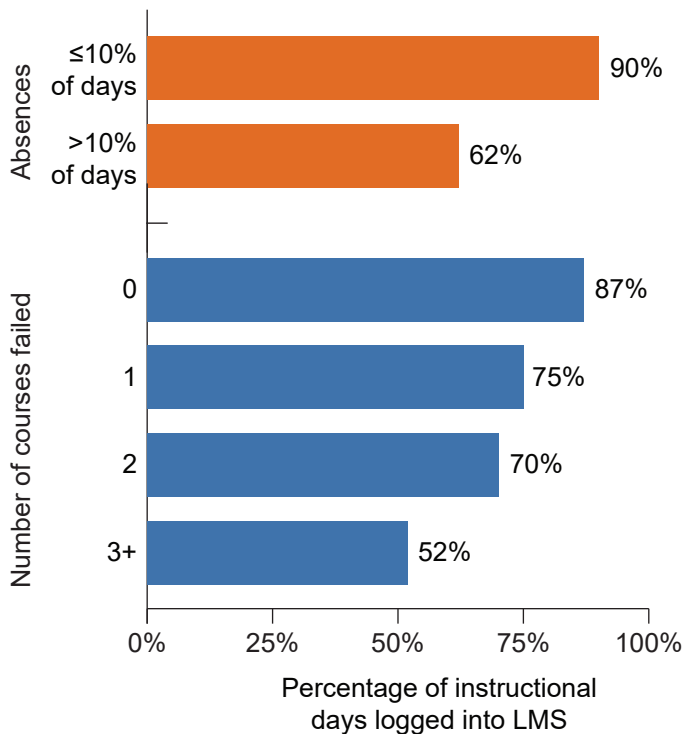
Source: PPS administrative data, 2020/21.

## How did student use of the district’s Learning Management System relate to absences and course failure?



Students who were disengaging during remote instruction not only had high absenteeism rates, but were also less likely to log in to the district’s LMS and open or submit coursework. Students who were chronically absent (that is, missing more than 10 percent of instructional days) and failing classes were also logging in at substantially lower rates.

### Students with absences or failing classes logged in to the LMS less



Sources: PPS administrative data and learning management system (LMS) data, 2020/21.

Note: Absences and course failures were calculated for the first semester of 2020/21. LMS data cover the school year through April 4, 2021, the period of remote instruction in PPS.

## Implications



Reports from across the country suggest these patterns are national, not Pittsburgh-specific.<sup>1-5</sup> Although the learning lags in Pittsburgh are not trivial, evidence-based programs such as high-intensity tutoring<sup>6</sup> can address gaps of this size. Given the increase in course failures, it will also be important to reengage students who disengaged during remote learning to ensure the pandemic does not lead to a substantial increase in dropout rates. Read more from REL Mid-Atlantic about [how to promote and maintain student engagement](#).

## References

- Lewis, K., Kuhfeld, M., Ruzek, E., & McEachin, A. (2021). *Learning during COVID-19: Reading and math achievement in the 2020-21 school year*. NWEA. <https://www.nwea.org/research/publication/learning-during-covid-19-reading-and-math-achievement-in-the-2020-2021-school-year/>
- Sawchuk, S. (2020). Should schools be giving so many failing grades this year? *Education Week*. <https://www.edweek.org/leadership/should-schools-be-giving-so-many-failing-grades-this-year/2020/12>
- Kaufman, J., & Diliberti, M. (2021). *Divergent and inequitable teaching and learning pathways during (and perhaps beyond) the pandemic: Key findings from the American Educator Panels Spring 2021 COVID-19 Surveys*. RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RRA168-6.html](https://www.rand.org/pubs/research_reports/RRA168-6.html)
- Hill, H. (2020). Remote learning cuts into attendance. Here are remedies. *Education Week*. <https://www.edweek.org/leadership/opinion-remote-learning-cuts-into-attendance-here-are-remedies/2020/12>
- Kamenetz, A. (2021, April 7). *New data reveals school attendance numbers during the pandemic*. NPR. <https://www.npr.org/2021/04/07/985128487/new-data-reveals-school-attendance-numbers-during-the-pandemic>
- J-PAL Evidence Review. (2020). *The transformative potential of tutoring for preK-12 learning outcomes: Lessons from randomized evaluations*. Abdul Latif Jameel Poverty Action Lab. [https://www.povertyactionlab.org/sites/default/files/publication/Evidence-Review\\_The-Transformative-Potential-of-Tutoring.pdf](https://www.povertyactionlab.org/sites/default/files/publication/Evidence-Review_The-Transformative-Potential-of-Tutoring.pdf)

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