# SCHOOL'S OUT FOREVER 

Truancy in New York City Reaches New Heights
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RResearchers and journalists have noted that student absenteeism has become significantly worse in schools in the wake of the COVID-19 pandemic and associated school closures. It is not possible to precisely quantify how absenteeism impacts student learning. But even if it isn't quantifiable, it's evident that missed school is an undesirable outcome.

New York City publishes school-level records to document average daily attendance, or the percent of enrolled students who attend school on any given day. They also publish records on chronic absenteeism, or the number of students who miss at least ten percent of school days (i.e. 18 days).

Records from New York City - when combined with other publicly available data allow a closer look at the landscape of and risk factors for absenteeism. The data show:

- Absenteeism in New York City was worse than the national average before the pandemic, but the pandemic significantly exacerbated the issue. Only 96 of 1,518 schools kept their average daily attendance rates steady or boosted them from 2018-19 to 2021-22
- Absenteeism was and remains particularly problematic for students in high school, Black and Hispanic students, and special education students. It was and remains worse in schools where surveys indicate that the school culture is comparatively poor

The negative effects of COVID-related school disruptions on student achievement have been thoroughly researched and discussed. Now,
districts across the country have nominally initiated efforts to accelerate student learning to compensate for months or years of disruptions and the provision of low-quality emergency remote online learning. Districts are flush with federal funds to carry out the task, but there remains a major logistical roadblock: Students simply aren't coming to school with the same regularity that they did before the pandemic.

Declines in student attendance and increases in chronic absenteeism - defined as missing at least 10 percent of school days - are not a secret, nor are they unique to New York. Media accounts and academic studies from across the country indicate that students feel disengaged from school and that COVID disruptions normalized the idea of not attending. Plus, COVID symptoms and concerns about spreading it represent a novel public health concern that increases the number of days that students are forced to miss. The research group Attendance Works estimates that nationwide the number of chronically absent students doubled from approximately eight million before the pandemic to 16 million in Spring 2022. ${ }^{\text {i }}$

The academic consequences associated with missed school are profound. An Economic Policy Institute study estimated that missing one or two days of school was associated with a statistically significant -0.10 standard deviation drop on the 2015 math NAEP exam (i.e. the "Nation's Report Card"). ${ }^{\text {ii }}$ Meanwhile, missing more than 10 days was associated with a - 0.64 standard deviation decline. An oft-cited evaluation of charter schools estimates that a one-standard deviation change in math NAEP scores is equivalent to 570 days of learning.iii This would mean that missing one
or two days of school is associated with academic losses equivalent to 57 fewer days of learning and missing 18 or more days equates to years of lost schooling.

The academic or economic consequences caused by missed school are unknowable. Absenteeism is not determined randomly, but is associated with a host of other student characteristics (e.g. socioeconomic status and motivation) that predict academic achievement. Advocates and education observers who confuse correlation and causation are at risk of overstating the consequences of absenteeism. Still, insofar as schooling is essential to childhood development and economic productivity, it is evident that absenteeism is an undesirable outcome, even if the associated costs can't be precisely quantified.

Scholarly research indicates that nationwide increases in absenteeism fueled by COVID and related school closures were not distributed evenly. Rather, they were most pronounced in schools with a higher share of Black, Hispanic, and low-income students. Schools with comparatively poor indicators for academic performance and school culture also fared worse. Absenteeism is swelling in schools that were already struggling and among families with comparatively fewer resources to mitigate its harms.

Addressing absenteeism in New York first requires quantifying and identifying the problem. Thanks to a robust data collection system, New York City - which enrolls close to one million public school students (roughly 40 percent of public school students in the state) - allows for granular inspection of where absenteeism increased and what forces appear to be driving it.

## DATA

New York City provides annual school-level data regarding attendance and chronic absenteeism. Additionally, the New York City Department of Education publishes data
on school-level demographics, staffing ratios, and parent and student surveys that touch upon school culture. For all analysis the author compared 2018-19 data to 2021-22 data to derive estimates of the ways in which COVID and school disruptions changed the nature of absenteeism. The estimates derived from this data do not perfectly isolate the effect of COVID disruptions - after all, data fluctuate naturally and it's unclear what would have happened in the absence of such disruptions. Nor do they invite extrapolation to forecast what is likely to occur in the future. They do however provide good clues and suggestive evidence regarding where COVID exacerbated absenteeism and to what degree.

## BIG PICTURE

In 2018-19, traditional public schools in New York City (charter schools exclusive) featured an average daily attendance rate (i.e. the percentage of enrolled students who attended school on any given day) of 91.5 percent and a chronic absenteeism rate (i.e. the share of students who missed eighteen or more days of school) of 26.5 percent. Data compiled by Attendance Works meanwhile indicate that the chronic absenteeism rate nationally in 2018-19 was 16.2 percent. ${ }^{\text {iv }}$ Only 22.6 percent of New York City schools featured attendance rates below or equal to the national average. In other words, absenteeism was an issue in New York City schools even before the pandemic started.

Only 96 of 1,518 schools kept their average daily attendance rates steady or boosted them from 2018-19 to 2021-22, and only 75 oversaw continuity or declines in chronic absenteeism. Overall, in 2021-22, New York City schools featured an average chronic absenteeism rate of 40.2 percent and an average daily attendance rate of 88.1 percent. In other words, compared to 2018-19, average chronic absenteeism across schools increased by more than 50 percent, whereas total daily non-attendance rose by 40 percent. Data from a panel administered by the National Center for Education

Statistics (NCES) indicate that "the average percent of chronically absent students reported by public school leaders during the 2021-22 school year was 17 percent." ${ }^{\mathrm{v}}$ If that number proves accurate, then it signals that chronic absenteeism in New York City is anomalously high compared to the national average.

## GRADE LEVEL BREAKDOWN

Data provided by the U.S. Department of Education in 2015-16 indicate that chronic absenteeism is more prevalent in high school compared to elementary and middle schools. ${ }^{\text {vi }}$ Specifically, 13.6 percent of elementary school students and 14.1 percent of middle school students were deemed chronically absent in 2015-16 compared to 21.1 percent of high school students. According to the Brookings Institution, the problem tends to be most acute in grade twelve. ${ }^{\text {vii }}$

In New York City, increases in chronic absenteeism in 2021-22 compared to 2018-19 were distributed rather evenly across grade levels, ranging from a low of a 9.6 percentage point increase in grade 9 to a 15.4 percent point increase in grade 6 . Worryingly, more than half of twelfth graders missed 18 or more days in 2021-22. Seventh graders featured the lowest incidence of chronic absenteeism, but that still amounted to one in three seventh graders being chronically absent.

Declines in average daily attendance were observed across all grade levels, ranging from a 2.0 percentage point decline in grade 9 to a 3.9 percentage point decline in grades eleven and twelve. Indeed, on any given day in 2021-22, nearly one in five twelfth graders were absent from school. Even those grades with the highest daily attendance rates (i.e. grades $2-8$ ) were typically missing one in ten students.

## DEMOGRAPHIC BREAKDOWN

U.S. Department of Education data from 201516 indicates that chronic absenteeism is more prevalent among Black (20.5 percent) and

Hispanic (17.0 percent) students compared to White (14.5 percent) and Asian students (8.6 percent). ${ }^{\text {vii }}$ Students with disabilities are at a 50 percent greater risk of chronic absenteeism than students without disabilities ( 22.5 percent versus 14.9 percent). Meanwhile, differences by gender are trivial ( 16.1 percent for females versus 15.9 for males) and English language learners are at somewhat lesser risk of chronic absenteeism compared to non-English language learners ( 13.7 percent versus 16.2 percent). National data does not disaggregate results by economic status, but the Brookings Institute relays that "poor" kids in kindergarten are about 2.5 times more likely to be chronically absent compared to "non-poor" peers. ${ }^{\text {ix }}$

In New York City, changes in average daily attendance and chronic absenteeism moderately exacerbated differences by race. For example, the average daily attendance rate among Hispanic students declined from 89.4 percent to 85.2 percent, whereas chronic absenteeism increased by nearly 50 percent such that nearly half of Hispanic students were deemed chronically absent. Meanwhile, the average daily attendance rate among Asian students dropped from 95.2 to 92.7 percent whereas chronic absenteeism rose from a comparatively modest 13.3 percent to 23.1 percent. An earlier Empire Center report, Learning Loss in New York During the Pandemic, observed that Black and Hispanic students experienced comparatively larger declines in achievement through the course of pandemic disruptions. ${ }^{\times}$ Differences in patterns of attendance may well be an important explanatory factor.

Changes in attendance by other demographic characteristics were not notably pronounced for one group versus another. For example, average daily attendance for students with disabilities dropped from 88.6 to 84.6 percent and chronic absenteeism rose from 37.9 to 51.9 percent. For students without disabilities, daily attendance went from 92.4 percent to 89.3 percent, and chronic absenteeism from 22.9 percent to 35.9 percent. Average daily attendance among girls dropped from 91.9 to

Figure 1: Percent chronically absent by grade level



5
33.5
19.54

4

| 3 | 34.8 |
| :--- | :--- |
|  | 21.17 |

2
37.2

| 32.2 |
| :--- |



Source: NYC Public Schools

Figure 2: Average daily attendance rate by grade level



Source: NYC Public Schools
Figure 4: Average daily attendance by demographic characteristic [Poverty level]


Source: NYC Public Schools
Figure 5: Average daily attendance by demographic characteristic [English learners]


Source: NYC Public Schools

## Figure 6: Average daily attendance by demographic characteristic [Gender]



Source: NYC Public Schools
Figure 7: Average daily attendance by demographic characteristic [Disabilities]


Source: NYC Public Schools
88.5 percent and among boys from 91.1 to 87.8 percent.

## DIFFERENCES BY BOROUGH

Changes in average daily attendance and chronic absenteeism were not notably different by borough. In terms of average daily attendance, all boroughs declined between 3.3 (Bronx, Queens, Staten Island) and 3.9 percentage points (Manhattan). In terms of chronic absenteeism, increases ranged from 12.9 (Bronx) to 14.8 percentage points (Staten Island). Across all boroughs it is evident that absenteeism was a problem before the pandemic but that the issue has become appreciably worse. In the Bronx for example, approximately a third of students missed 18 or more days of school. In 2021-22, nearly half of students missed 18 or more days.

## SCHOOL CULTURE SURVEYS

For several years the NYC DOE has surveyed teachers, parents, and students in grades 6-12 about various aspects of school culture. Specifically, questions touch upon the "elements" of trust, effective school leadership, family community ties, rigorous instrution, teacher collaboration, and supportive environment.

In 2019 each school received a score ranging from 1 to 5 for each element of the survey, excluding "supportive environment." The score reflects the average response of survey takers for each item in the element, with a score of 1 representing the most negative attitude and a score of 5 representing the most positive attitude.

Figure 8: Percent chronically absent by demographic characteristic [Race]


Figure 9: Percent chronically absent by demographic characteristic [Poverty level]


Source: NYC Public Schools
Figure 10: Percent chronically absent by demographic characteristic [English learners]


[^0]Figure 11: Percent chronically absent by demographic characteristic [Gender]


Source: NYC Public Schools • Created with Datawrapper
Figure 12: Percent chronically absent by demographic characteristic [Disabilities]


Source: NYC Public Schools

These element scores were associated with absenteeism during the 2018-19 school year. Specifically, when it comes to average daily attendance, a one-point increase in trust score was associated with a 1.32 percentage point increase in average daily attendance. Effective school leadership was associated with a 1.51 percentage point increase, fam-ily-community ties with a 1.91 percentage point increase, rigorous instruction with a 2.29 percentage point increase, and teacher collaboration with a 1.93 percentage point increase. All these associations were statistically significant at the 90 percent confidence level, which means that there is only a one in ten chance that the relationships exist due to random chance. They are also practically significant.

A school with "rigorous instruction" scores in the 25 th percentile would be expected
to have an average daily attendance rate 2.29 percentage points lower than a school in the 75 th percentile. Considering that 8.5 percent of students were out of school on any given day in 2018-19, this means that school culture and rigorous instruction in particular might go a long way toward explaining pre-COVID patterns in average daily attendance.

When it comes to chronic absenteeism, the story is much the same. A one-point increase in trust score was associated with a 4.83 percentage point decrease in the incidence chronic absenteeism. Effective school leadership was associated with a 6.52 percentage point decrease, family-community ties with a 5.92 percentage point decrease, rigorous instruction with an 8.95 percentage point decrease, and teacher collaboration with a 7.82 percentage point decrease. None of these correlations prove that culture caused more absences, but

Figure 13: Average daily attendance by borough


Figure 14: Chronic absenteeism by borough

the magnitude of the relationships and past research about the type of factors that cause students to miss school certainly elevates the likelihood that this was in fact the case.

There is mixed evidence as to the degree to which these various elements of school culture exacerbated attendance issues through the course of pandemic disruptions. The relationship between the 2018-19 and 2021-22 change in daily attendance is not significantly associated with family-community ties, rigorous instruction, or trust. It is however significantly associated with effective school leadership and teacher collaboration. Specifically, if school A received a 3 on effective school leadership score and school B received a 4, school B would be expected to experience a 2018-19 to 2021-22 change in daily attendance that outperforms school A by 0.30 percentage
points. That number would be 0.23 percentage points when it comes to teacher collaboration. None of the 2019 survey scores are significantly associated with changes in chronic absenteeism from 2019-2022.

Altogether, it appears that school culture can play an important role in shaping patterns of student absenteeism. When it comes to pandemic-era changes in absenteeism, however, school culture appears to have played a relatively modest role in explaining variation across schools.

## DIFFERENCES BY ACHIEVEMENT

Schools with lower levels of student achievement already had worse issues with absenteeism before the pandemic. Specifically, a one percentage point increase in combined math

Table 1: Element Scores on 2019 NYC School Survey

|  | Average | 10th <br> percentile | 25th <br> percentile | 50th <br> percentile | 75th <br> percentile |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Trust | 3.62 | 2.72 | 3.25 | 3.71 | 4.06 |
| Effective <br> school <br> leadership | 3.63 | 2.86 | 3.28 | 3.65 | 4.02 |
| Family <br> community <br> ties | 3.73 | 2.87 | 3.42 | 3.84 | 4.18 |
| Rigorous <br> Instruction | 3.60 | 2.62 | 3.11 | 3.60 | 4.11 |
| Teacher <br> collaboration | 3.69 | 2.80 | 3.25 | 3.70 | 4.20 |

[^1]and ELA proficiency rates was associated with a 0.09 percentage point increase in average daily attendance and a 0.46 percentage point decrease in chronic absenteeism in 2018-19, both of which are statistically significant.

Pandemic disruptions exacerbated this phenomenon - a one percentage point increase in average daily attendance was associated with a 0.03 percentage point improvement in average daily attendance and a 0.08 percentage point decrease in chronic absenteeism. Illustratively, the 2018-19 to 2021-22 change in average daily attendance at a school with 75 percent proficiency would be better in expectation than a school with 25 percent proficiency by 1.5 percentage points. Meanwhile, the expected change in chronic absenteeism at the higher performing school would be 4 percentage points better.

## PUTTING IT ALL TOGETHER

Demographic characteristics, school culture, and student achievement all to some extent correlated with 2018-19 levels of average daily attendance and chronic absenteeism, as well as changes in those metrics between 2018-19 and 2020-21. However, demographics, school culture, and student achievement are also plausibly interconnected. Multiple regression - a statistical technique that allows for examining the relationship of multiple predictor variables (i.e. demographics, culture, test scores) on a dependent variable (changes in average daily attendance and chronic absenteeism) - can help disentangle these relationships.

When it comes to average daily attendance in 2018-19, it turns out that many of these variables have a statistically significant relationship even after holding the other variables constant. Effective school leadership emerges as particularly notable. Specifically, a onepoint increase in effective school leadership score was associated with a 0.29 percentage point increase in average daily attendance
and a 1.67 percentage point decrease in chronic absenteeism even after controlling for other survey measures, school demographics, and combined math and ELA proficiency rates. (See Appendix B)

When it comes to changes in absenteeism from 2018-19 to 2021-22, issues became more pronounced in schools with higher levels of female students and students with disabilities even after controlling for survey measures, proficiency rates, and demographic variables. In short, culture, demographics and test scores all helped explain patterns of absenteeism before the pandemic, but the composition of female students and students with disabilities emerge as factors that exacerbated pre-existing patterns through the course of pandemic disruptions.

## POLICY IMPLICATIONS

New York City public schools experienced a dramatic and disturbing decline in average daily attendance and increase in chronic absenteeism from 2018-19 to 2021-22. Whether 2021-22 was an anomaly or represents a new baseline merits careful watching. To be sure, media reports from around the country suggest that issues in absenteeism spurred by the pandemic have not fully resolved.

There is no simple fix to boosting attendance rates, though addressing the safety of school environments is a necessary if insufficient start. Mayor de Blasio championed therapeutic interventions to address student misbehavior but the strategy appears to have failed. According to Chalkbeat, suspensions have fallen 64 percent over the last decade. ${ }^{\text {xi }}$ Meanwhile, the number of weapon confiscations from students increased by 80 percent in 2021-22 compared to pre-pandemic levels. ${ }^{\text {xi }}$

Policy reform could also help ensure that schools better meet the needs and schedules of families, which were often restructured or rethought during the pandemic. In Florida, for example, recent adoption of part-time enroll-
ment affords students a la carte education offerings that empowers them to mix and match courses at schools and complete some courses in a home-based learning environment (i.e. homeschool or microschool). This arrangement could be particularly beneficial for students who enter the labor force during high school.

## An earlier Empire Center report, Perverse

 Incentives, High Costs and Poor Outcomes, outlined the extent to which New York City schools are plagued by dysfunction and failure in their commitment to students with special needs. ${ }^{\text {xiii }}$ Properly addressing these systemic issues won't be easy, but it could turn the tide on absenteeism issues that disproportionately afflict this population.Already-high levels of absenteeism worsened by the pandemic also add an important contextual layer for discussions about staffing ratios, including a September 2022 law that
caps New York City classes at 20 students for grades K-3, 23 students for grades 4-8, and 25 students for high school classes. Consider for example the case of Harvard Collegiate High School in Manhattan. Data show that it experienced a dramatic drop in average daily attendance, from 86.3 percent in 2018-19 to 71.1 percent in 2021-22. If only 71.1 percent of students attend school on any given day, then a class with 25 students assigned to it might only average a headcount of 17 or 18 students per day. In other words, teacher-to-student ratios miss the mark of what occurs in the classroom. Future discussions about staffing ratios should endeavor to make sure that policy is informed by the number of students who sit in a classroom and not the number who happened to be assigned to it.

## APPENDIX A



## Table 2: Predictors of changes in absenteeism from 2018-19 to 2021-22

| Student <br> Characteristics | 2018-19 <br> daily <br> attendance | 2018-19 <br> chronic <br> absenteeism | $2018-19$ to <br> $2021-22$ <br> daily <br> attendance <br> change | 2018-19 to <br> $2021-22$ <br> chronic <br> absenteeism <br> change |
| :---: | :---: | :---: | :---: | :---: |
| Female | -0.02 | $0.07^{*}$ | $-0.02^{*}$ | $0.126^{*}$ |
| \% Black and <br> Hispanic <br> \% Students with <br> Disabilities | $-0.02^{*}$ | $0.09^{*}$ | 0 | $0.03^{*}$ |
| \% Poverty | 0 | $0.43^{*}$ | $-.050^{*}$ | $0.11^{*}$ |
| Combined <br> Math+ELA <br> proficiency rate | $0.05^{*}$ | $-0.19^{*}$ | $-0.01^{*}$ | 0.03 |

School Elements

| Trust | -0.03 | -0.39 | 0.06 | -0.33 |
| :---: | :---: | :---: | :---: | :---: |
| Family- <br> community | -0.01 | 0.83 | -0.03 | 0.77 |
| Rigorous <br> instruction | $0.22^{*}$ | $-1.52^{*}$ | -0.05 | 0.41 |
| Effective <br> leadership | $0.29^{*}$ | $-1.67^{*}$ | 0.17 | 0.08 |
| Teacher <br> collaboration | 0 | -1.05 |  |  |
| *the relationship is significant at the $90 \%$ confidence level | -0.15 |  |  |  |
| Source: Nyc Public Schools |  |  |  |  |

## ENDNOTES

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## EMPIRE

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[^0]:    Source: NYC Public Schools

[^1]:    Source: NYC Public Schools

