

# How America's Schools Responded to the COVID Crisis

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## Overview

COVID-19 has become one of the greatest crises ever facing the country. It is also, therefore, one of the greatest crises facing the nation's schools. In this brief, we describe how America's schools have adjusted to operating while their buildings have been shuttered. In particular, how did different types of schools respond in different ways?

Our analysis is based on information collected from a nationally representative sample of 3,511 school websites, including traditional public schools, private schools, and charter schools. We visited each website during the month of May, starting roughly six weeks after most schools had shut down in-person instruction.

While visiting the websites, we captured five types of information: the level of personalization and engagement provided in group instruction (e.g., live video classes), other forms of personalization (e.g., office hours outside of class), progress monitoring (e.g., tracking attendance and grading assignments), equity of access (e.g., having plans for students with disabilities and English language learners), and breadth of service (e.g., availability of food and school counselors).

Because we had data on so many different topics, we also developed a single index summarizing how comprehensive school responses were overall, giving equal weight to each of the above five categories. Our analysis focuses on how extensively different schools responded on this overall index and its component parts.

While there are some limitations in the data, due to the uneven use of websites by schools, our analysis still points to the following conclusions:

- *Schools seem to have responded most extensively in providing academic instruction to general education students. However, even when schools provided remote learning, they appear to have done less to serve students with disabilities and English language learners, and to provide counseling services for all students. Additionally, websites often did not mention progress monitoring. Schools often provided access to computers and the internet.*

- *The demographics of students' families—specifically the educational attainment of parents and other adults in the neighborhood—were the strongest predictors of school responses.* This is the first study to separate this factor from student race and income.
- *There is a difference between school responses and student experiences.* Even if schools respond the same ways, students are likely to have varying experiences due to differences in home environments. This may be why our analysis, as well as prior studies, find few differences in school responses by student race and income. However, prior studies do suggest that student experiences (e.g., how often students engaged with teachers) were inequitable by race and income.
- *Midwestern states responded most extensively, while Southern states responded least extensively.* This holds even after taking into account income levels and other demographic measures.
- *Traditional public schools (TPS) shifted to some form of remote learning more slowly than charter and private schools, but they eventually caught up on most measures.* TPS exceeded charter and private schools on breadth of service and equity of access. However, charter schools surpassed TPS and private schools on personalization and engagement outside of class and progress monitoring. We do not observe differences between standalone charters and those operating under management organizations.
- *The differences in results by sector are probably partly explained by the types of students they serve and the rules they are subject to.* Private schools performed similarly to traditional public schools on the two personalization and engagement dimensions and on progress monitoring, but poorly on breadth of service and equity of access. This is likely because private schools serve advantaged populations that are less likely to have disabilities or be English language learners, or need computers, internet access, or meals provided. Also, private schools have weaker obligations to meet federal standards regarding special education.

Our analysis also provides evidence related to current policy discussions regarding internet access and school spending:

- *Schools in neighborhoods with more widespread internet access responded more extensively than those with less internet access.* As with the other results, this holds even after accounting for all the other factors mentioned above. School leaders are unlikely to use techniques like live classes if they know many students cannot access them. Schools in neighborhoods with greater internet access had also probably been using online tools more prior to the crisis and were therefore better prepared to rely on them when the crisis started.
- *Online learning tools were used widely.* Seventy-three percent of schools websites that included any COVID plan mentioned at least one online tool that students were expected to use. The most commonly mentioned tools were learning management systems such as Google Classroom (used by more than half of all schools that mentioned COVID on their website), followed by video-based tools such as Zoom. Tutorial/assessment tools such as Khan Academy were also common, though no single tool in this category stands out.

The conclusions on adult education levels and internet access show why we should not interpret the above school responses as evaluations or judgments of schools themselves. We are aware of cases where schools responded extensively; in other cases, they may have fallen short. But the more limited responses by some schools and districts were clearly constrained by external forces (e.g., limited internet access and factors related to parent/neighborhood education levels), which are largely outside the control of schools.

The findings above have important potential policy implications:

- *Gaps in educational opportunity—by race, income, and class—are likely widening as a result of school closures and addressing them will require considerable effort.* Inequality in educational opportunity by family demographics is a longstanding and widespread problem. Parent education, in particular, has consistently been the strongest predictor of student outcomes under normal school operating conditions. This is likely worse in a crisis that has shifted the educational process from schools to homes. More educated parents may have additional experience with the online tools students use, and they have jobs that are more flexible, stable, and lucrative, all of which create better home learning environments. Moreover, parent education is correlated with income and race in ways that will expand opportunity gaps on those dimensions as well.
- *We find little evidence that any differences in the response of the nation's schools is due to traditional public schools being hampered by regulations, as some analysts have suggested.* While regulation may have slowed the responses of some schools—the worst cases made national headlines—the average difference in the shift to remote learning was just a few days. By May, traditional public schools had overall index scores that were on par with charter and private schools. The centralization of school districts may have meant that traditional public schools had greater capacity to respond, by facilitating the development of administrative expertise in areas like information technology and teacher professional development that were important for the transition to remote learning. Also, consistent with prior evidence, traditional public schools reported greater use of online tools that are so important to remote learning.
- *Federal, state, and local policymakers have options that could improve educational outcomes.* Schools could direct resources, and perhaps open their doors, to those specific students who have fallen behind. Governments could expand internet access. Also, though school spending did not predict school responses, the large cuts that seem to be looming will unquestionably lead to less comprehensive school activities this fall, unless federal and state policymakers step in. Finally, state and federal governments could ease the economic insecurity that falls hardest on parents who have lower incomes and less education.

These are only ideas, meant to show the connection between our findings and options that lay before policymakers. While we make no specific recommendations, we believe this evidence, combined with other research described in the accompanying technical report, can help improve decision-making over the coming months, during a crisis that is still unfolding. Whether to continue remote learning is fundamentally a decision about public health, but the educational responses to those public health decisions can take many forms.

## How Did We Carry Out the Analysis?

The goal of the project was to describe the extent to which schools provided personalized and engaging education and a wide range of services in response to the COVID crisis. This was unusual because the project was designed mainly to inform the response to an ongoing situation. We therefore had to move quickly before the data disappeared from websites. Schools began closing in mid-March, and the academic years ended, in some states, as early as mid-May.

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We started the project using the National Longitudinal School Database (NLS), also created by the REACH center. The NLS includes all 98,068 general education, brick-and-mortar, K-12 schools in the U.S., including traditional public, charter, and private schools. Much of the NLS data come from the U.S. Department of Education, focused on publicly funded schools; however, we also have data from multiple sources on private schools. We did not examine virtual schools, special schools, or schools that did not primarily serve grades K-12.

Using the NLS, we created a random sample of schools that is representative of each sector within each state (e.g., we can draw conclusions about charter schools in Arizona and private schools in Massachusetts). We first identified website addresses for all schools in the United States that had them. Using methods described in the accompanying technical report, we linked over 87% of all schools to a web address.

Next, we randomly selected a total of up to 80 schools within each state: 40 traditional public schools, 20 charter schools, and 20 private schools. Within each of these groups, we selected specific numbers of urban and non-urban schools, as well as elementary, middle, and high schools. In some cases, there were not enough schools of a given type, and we used a smaller number. We used sampling weights so that our results closely reflect what we would have found if we had examined every individual school website in the country—that is, in analyzing this sample, we are describing all the nation’s schools.

## Collecting Data from the Web Sites

Data for the sample of schools were collected by the research team, including most of the authors of this article, along with two dozen undergraduate students from Tulane University, whom we refer to as website coders. We developed a single rubric with specific questions that we used for every website. To develop the rubric, we started by looking at the results from other COVID-related data collection projects and viewed small samples of school websites to learn what type of data we could feasibly collect this way.

Once we had a draft of the rubric and achieved reliability within the research team members, we trained the website coders and had them pilot test the rubric on 1-4 websites. We then checked for reliability, altered the

rubric and guidance again, retrained the coders, and gave them more pilot websites. After going through four rounds of this process, we achieved reliability that meets the usual academic standards.

We saw in the pilot stage that traditional public schools often relied on their school districts to communicate about the COVID response; therefore, we developed two versions of the rubric: one for schools and one for school districts. Each time we coded a traditional public school, we also coded the associated school district website. When the school's data were missing, we replaced them with the district's data. Since this step was not possible with charter or private schools, we also carried out some analyses that essentially ignore the district data. (See later discussion.)

The data used in this report were collected from May 5 to June 3, 2020. Other research suggests that it took schools some time to shift to remote learning. Therefore, we are capturing data that reflect what schools were doing after they had made that shift. We do not have data on schools' initial responses in March and April.

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Of the 3,511 schools for which we sought data, we found some information about COVID responses for 2,689 schools (77% of the total). This represents the denominator in the results that follow.

## **Types of Data Collected**

We organized the data collection and analysis by identifying five educationally important areas:

- *Personalization and engagement in instructional activities.* This is reflected in the use of live instruction, recorded videos, various online tools, and whether schools provided learning packets.
- *Personalization and engagement outside of class.* We measure this using information about whether students and teachers are expected to interact during office hours, morning meetings, and advisory meetings. We also measured the means of communication (e.g., email or video) and who is expected to initiate these conversations (students or teachers).
- *Progress monitoring.* We measured this by whether schools were still attempting to track attendance, grade remote work, and count remote work toward final grades. In those schools where work and attendance/participation were optional, we can expect that fewer learning activities occurred.
- *Breadth of service.* We measure this by whether and how schools offered meals and counseling services.
- *Equity of access.* We checked if school websites referenced a plan for students with disabilities and English language learners and/or offered to provide computers and internet access to students who do not have them.

After we collected the data, we created individual indices for each of these five areas. In general, we assigned each school activity the same number of “points” and only departed from when there was a compelling reason to do so. There were two main exceptions to that rule: (a) we considered live/synchronous and video-based communication as more important than the others for facilitating personalization and engagement; (b) in some cases, we assumed the mode of communication is interconnected with the expectations associated with the related activity. For example, offering a live, video-based class on Zoom is more likely to be educationally meaningful if students have been told that their participation is required. For this reason, with the two personalization/engagement constructs, we weighted the mode based on whether participation was expected.

After creating each individual index, we scaled each so that it had a range of 0-10 and then summed these together to create an overall index with a maximum value of 50. We also tried two alternative versions of the index to ensure that the results are not sensitive to our initial judgements about which activities are most important. In one case, we gave the same number of points to each activity. The third version is somewhere in between this and the first version described earlier. We draw the same conclusions using all three versions and therefore only report the first version in this policy brief.

## Dealing with the Website Data Limitations

We used website data for several reasons: they are publicly available, the vast majority of schools have a website, and schools clearly used them to communicate about COVID. Also, when putting information on their websites, schools are responsible for following through on what they publicly say they are going to do; the information on the website therefore likely provides useful information about school activities.

The main limitation of the website data is that schools do not have to report everything they are doing. When school websites did not indicate live instruction, for example, this could have been because they were not providing live instruction or because they just happened not to mention it. At the same time, schools are probably more likely to be doing the things they mention on their websites, and families may be more aware of those options. In this respect, communication about school activities on the website is especially meaningful. But we are still likely to under-state the extent of school activities, and this is a significant limitation of website data.

We address the limitations in website data by focusing the analysis less on the percent of schools that mention specific activities, and more on comparing patterns of responses across different schools. For example, we look at how schools located in neighborhoods with more internet access responded differently than those with less internet access. When we analyze the differences between two groups, this partially cancels out any under-counting of school activities.

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In addition, we use multiple methods to test whether using different techniques or assumptions impacts our results. For example, we used the following methods in some analyses:

- *Checked whether schools that provided no information were different from those that provided some information.* We checked whether the results changed when we assumed that schools without any COVID information on their websites would have provided the same information as similar schools that did have information (called non-response weights). The results did not change.
- *Collected additional data through web scraping, allowing us to measure how much schools used their websites generally.* Schools that used their websites to communicate about school schedules, school activities, and other matters before COVID are also probably more likely to use their websites to communicate about COVID. Therefore, we created a measure that added up the total number of links and files on each website, and we controlled for this measure in some of the analyses when we were looking at patterns of response.
- *Focused just on schools that had low rates of missing data.* Specifically, we dropped the 25% of schools that had the least amount of information about their COVID responses on their websites. (Note that we had already dropped schools with no information available, so this method uses the same logic but takes it a step further.)
- *Restricted traditional public schools just to the data from school websites, largely ignoring the district data.* This addressed the issue that traditional public schools naturally have more data because they have both school and district websites. By restricting the data, we reduced the chance of giving an unfair advantage to traditional public schools when we compare results across sectors.

When examining the patterns in school responses, we only say that a relationship exists when results are consistent (and at least sometimes statistically significant) across all the various analyses.

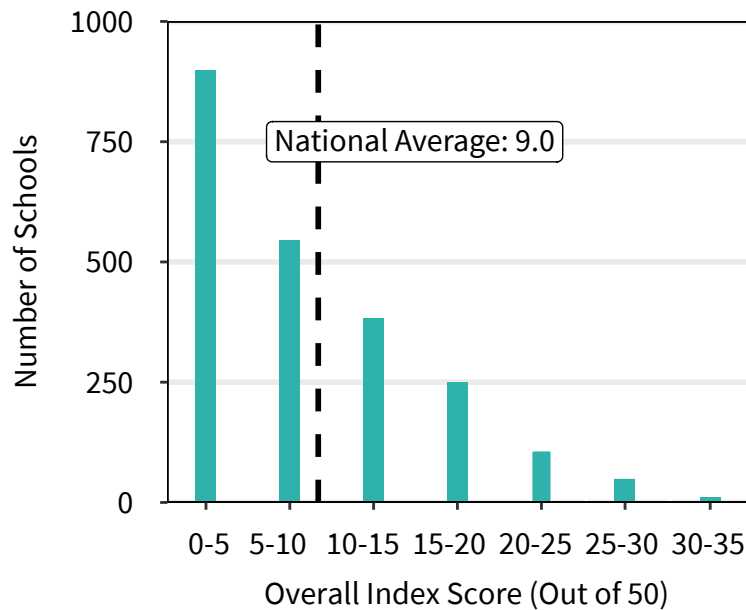
Finally, we compare some of our patterns to those from other studies that have examined similar questions using different data (especially parent and educator surveys). Where we can make direct comparisons, our results reinforce prior studies or differ in predictable ways, giving us additional confidence that the patterns we observe reflect real differences in school responses.

## **What General Patterns Do We See?**

Our data include more than 45 separate items for each school. The goal of the analysis is to study the patterns of response across school types. First, we show the overall index of school response. Later in the text, we also report data about individual indices for specific areas (e.g., personalization and engagement in instruction).

Figure 1 reports the distribution of schools on the overall index. The average value was 9.0 out of 50, indicating that most schools did not report carrying out most of the activities for which we sought information. The standard deviation of the overall index, a measure of variability, was 6.9. The number of schools gradually tapers off as the index scores grow higher. The highest score we observed was 35.1. (Recall that the maximum possible value was 50.) The distribution does vary across different parts of the index (e.g., progress monitoring).

**Figure 1. Schools score an average of 9 out of 50 points on the comprehensiveness of their remote learning efforts**



The main pattern that is consistent is that a large number of schools had very low index levels. We start with this basic information to provide a sense of the scale of the index and how much it varies across all schools. The key conclusions of the brief come from what follows.

## How Did Schools Respond Differently Across States?

In all the studies released on COVID response so far, researchers have focused on simple relationships between variables (e.g., school activities in low- versus high-income schools). This is informative, but also limited for understanding the underlying mechanisms of these relationships. For example, a connection between school activities and family income might reflect some other factor that happens to be correlated with family income, such as school spending.

To address this, the following analyses of school response patterns use a method called regression analysis, which accounts for all the factors we can measure simultaneously. For example, we can examine the relationship between school activities and family income among schools that have the same level of school spending, to isolate the roles of these various factors.

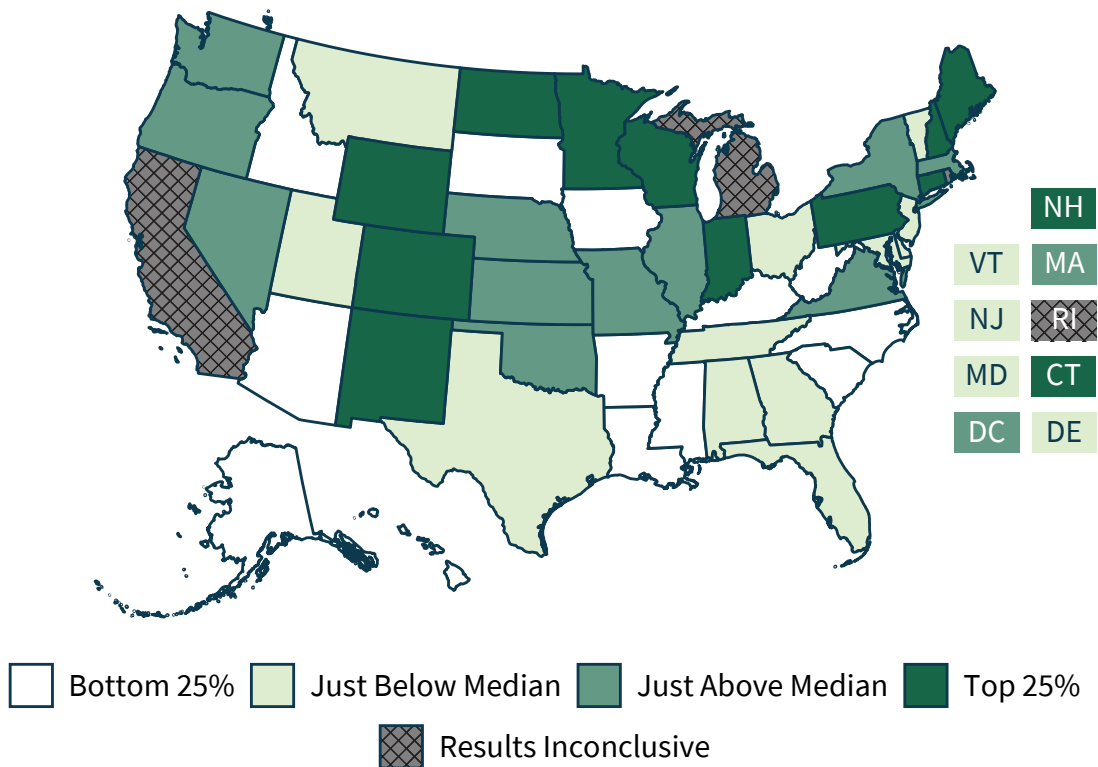
To accomplish this, we combined the website data we collected with U.S. Department of Education data on school demographics, schools spending, and other information. We also rely on U.S. Census data regarding households in the neighborhood around the school: the percentage of families where an adult has a bachelor's degree or above and internet access rates.



In the analysis of state patterns below, we use four different regression analyses, each of which takes a different approach to the data under-counting problem discussed above (see Dealing with the Website Limitations). From each regression, we obtain the state average index after adjusting for factors such as demographics. We then average the results from the four regression methods together and rank states on this basis. In this way, we minimize the under-counting problem, which could vary across states, and ensure that differences across state are not due to their demographics.

Figure 2 shows these state-specific results. The dark-shaded states are in the top quarter of school responses, according to the adjusted state index, while the unshaded states are in the bottom quarter. The other states are in between, with darker shades reflecting higher index levels. The results indicate that Midwestern states responded most extensively when school buildings closed, while Southern states responded less extensively. Aside from those two groups, there are no obvious geographic patterns.

**Figure 2. Schools in Midwestern states had the most comprehensive COVID-19 responses**



Notes: Figure 2 shows where states rank on the adjusted state index, after accounting for differences in family and neighborhood income, race, neighborhood adult education, internet access and other factors. We also average the results together across four different regression models that address data limitations in different ways. Michigan and Rhode Island are gray because they had very high scores on three of the regression models, but were much lower on a fourth. Results for California were also inconclusive.

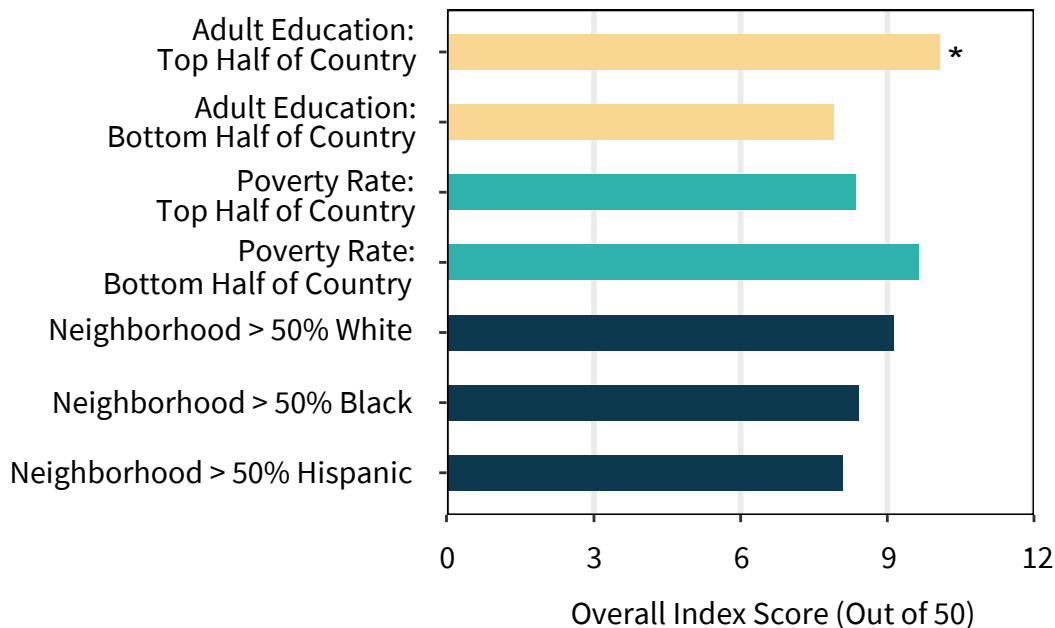
## How Else Did Different Schools Respond in Different Ways?

In this section, we summarize school responses and how they related to student demographics, internet access, school spending, and school sector. As with the state analysis, we draw conclusions based on regression analyses and only conclude that a relationship exists if the results are consistent across the various methods we tried.

### *School Responses by Student Demographics*

Prior research has found that student experiences during the COVID crisis vary by the poverty level of the families schools serve, though school responses are not as clearly correlated with poverty. We, too, find that school responses are not clearly related to poverty (or race), as noted in Figure 3.

**Figure 3. The education level of adults in the school’s neighborhood is the only demographic factor clearly related to school responses**



Notes: Figure 3 reflects the average overall index score for each group of schools (without regression adjustment). However, the general conclusions are similar in the regression results. Asterisks indicate that the difference for a given group is statistically significant in the regression analysis.

However, this does not mean demographics are unimportant. In fact, the educational attainment levels of parents and the adult population in the local neighborhood appear to be the strongest predictor of school response. Indeed, the education level of adults in the school’s neighborhood is the only factor that is statistically significant.

These results are not surprising in the sense that parent education is consistently the best predictor of students’ educational outcomes, under normal operating procedures. But there are good reasons to expect an even stronger relationship in the current crisis. Parents with higher levels of education are less likely to become unemployed, at a time when unemployment rates are at record levels. Even if they are unemployed, they have greater wealth to

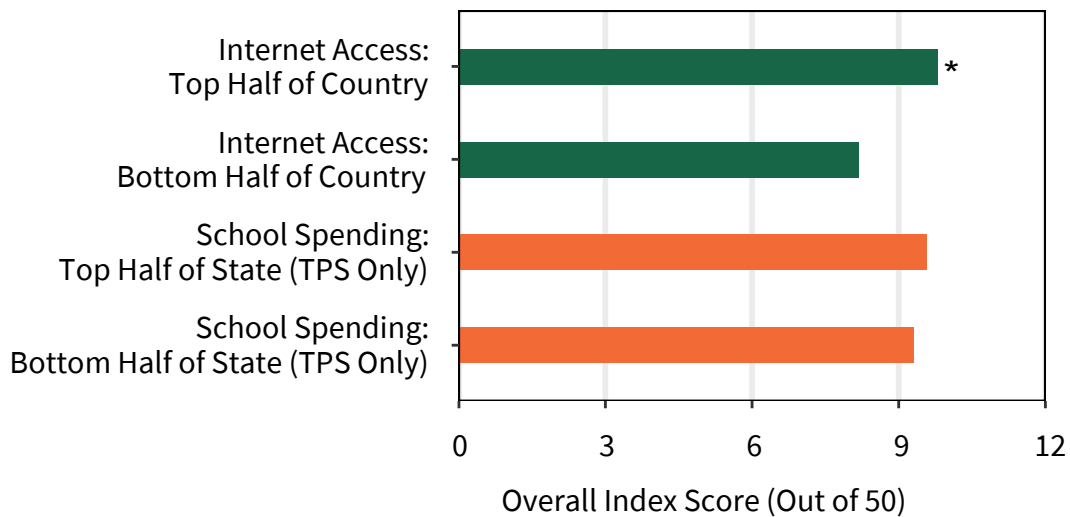
fall back on, providing economic security. The jobs they hold are also more amenable to work at home, allowing parents to support their children’s learning. Since educators are increasingly dependent on families to facilitate instruction in the current crisis, it is not surprising that schools would adjust what they do based on what parents can and wish to do themselves.

We also look for possible inequities on other dimensions. While not shown in the figure, urban schools also seem to have responded more extensively than non-urban schools, as measured by the overall index. This also holds when we account for demographics and other factors, such as district size. We find that only 37 percent of schools made even a vague reference to a plan for students with disabilities on their websites and only 17 percent of schools mentioned English language learners. (See details in technical report.) This pattern fits in with previous parent surveys which found that parents of children with disabilities were much more likely to report that their children were not receiving services or remote instruction.

*School Responses by Internet Access and School Spending*

While it is important to understand factors like demographics, policymakers have more direct control over the next two factors we consider: school spending and internet access (see Figure 4). When we just look at the simple relationship between spending and school responses, we do see a positive and statistically significant relationship, but this becomes insignificant when we account for student demographics and other factors in the regression analyses.

**Figure 4. Schools in neighborhoods with higher access to the internet scored almost two points higher on the school response index**



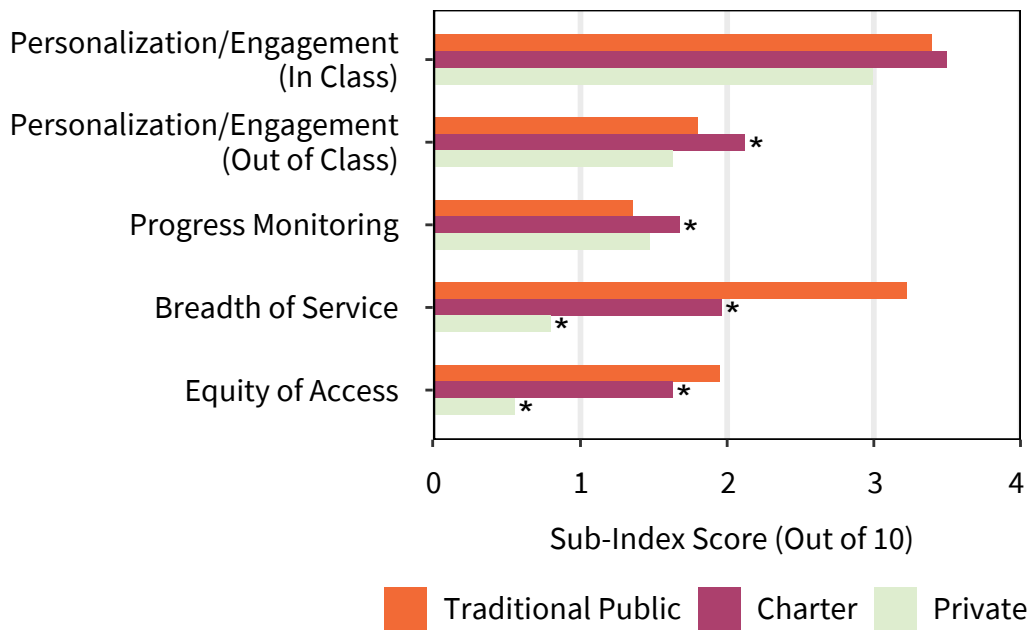
Notes: Figure 4 reflects the average overall index score for each group of schools. We place schools in top/bottom categories based on school spending within the state because of differences in cost of living and local labor markets. Internet access, like those factors shown in the other figures, is based on national, rather than within-state, comparisons. Also, note that the results for school spending are based only on traditional public schools (TPS) because these data are not available for charter or private schools. When the differences are statistically significant in the regression analysis, they are indicated with an asterisk.

The differences are much larger by levels of internet access. Schools in the top half of the country in terms of internet access have an index score that is almost two points higher. These results are corroborated in the regression analyses. In fact, the differences by internet access appear even larger when accounting for other factors, such as student demographics.

*School Responses by Sector*

Figure 5 shows the results for different components of the overall index. Charter schools out-performed TPS and private schools on personalization and engagement in other communication and progress monitoring, while TPS and private schools were similar on these metrics.

**Figure 5. Traditional public schools and charter schools had more comprehensive responsive responses in certain areas**



Notes: Figure 5 reflects the regression-adjusted school response individual index, averaged across the four specifications (similar to the state analysis above). Asterisks next to charter and private school bars indicate that they are sometimes statistically different from TPS in the direction shown.

However, private schools consistently scored lower than traditional public and charter schools, particularly in two areas: breadth of service and equity of access. This is not surprising. Recall that the breadth of service includes school efforts to provide meals to students and access to counselors. Traditional public schools serve more students who need these services, as well as students with disabilities and English language learners. So, students in these schools have a greater need for those services. Also, private schools are not subject to the same rules when it comes to special education and English language learners, and so feel less legal pressure to address their needs and report those activities.

When we focus just on the other three factors—progress monitoring, personalization/engagement in instruction and other personalization—the sectors look very similar to one another (especially in the regression analyses). It is partly because the results vary so much across these individual components that we do not report the differences in the overall index in Figure 5. The cross-sector comparisons are only meaningful when we look at the specific school activities.

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While not shown, we also broke down the charter and private school results by more detailed school types. We find that neither the type of charter authorizer (e.g., school district, state agency, university) nor the type of management structure (network or standalone) yielded consistent differences with traditional public schools. The main exception is that, in some cases, charter schools authorized by school districts had less extensive responses, but this could be because some of those schools relied on school district websites. (We did not collect district website data for charter schools.)

The above findings align with some survey results showing that charter schools out-performed others on several dimensions that align with our measure of personalization and engagement outside of class. Some prior analyses of school websites had shown much wider differences between school districts and charter schools, which was apparently due to non-representative samples of schools.

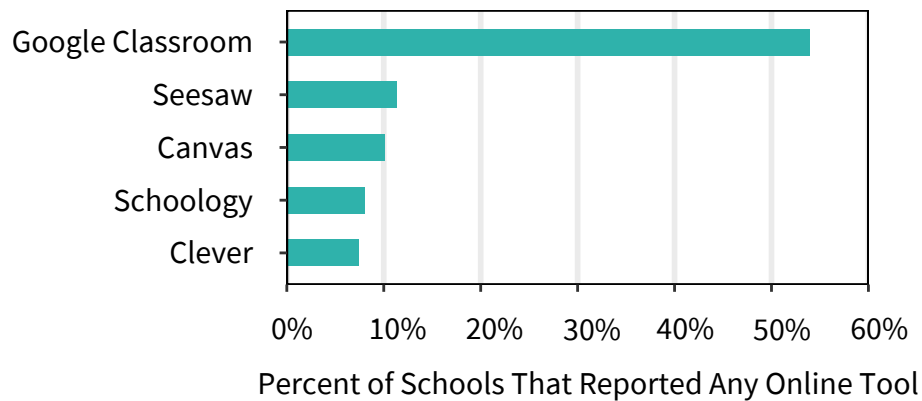
Overall, the results are consistent with both prior research and with our predictions. Charter and private schools responded relatively effectively in the areas where they typically focus their attention. Private schools, in particular, responded in ways that align with the interests of the specific types of students they serve.

## **What Kinds of Online Educational Tools Did Schools Use?**

When viewing the websites, we also asked coders to document specific online tools that students were expected to use. Knowing which tools schools used is informative about the type and extent of online learning taking place. We identified 105 online tools at the outset and subsequently researched the functionality of each one. Seventy-three percent of school websites indicated that students were expected to use one of these tools. (The coders excluded tools that were only mentioned as “resources,” which implied that their use was optional.)

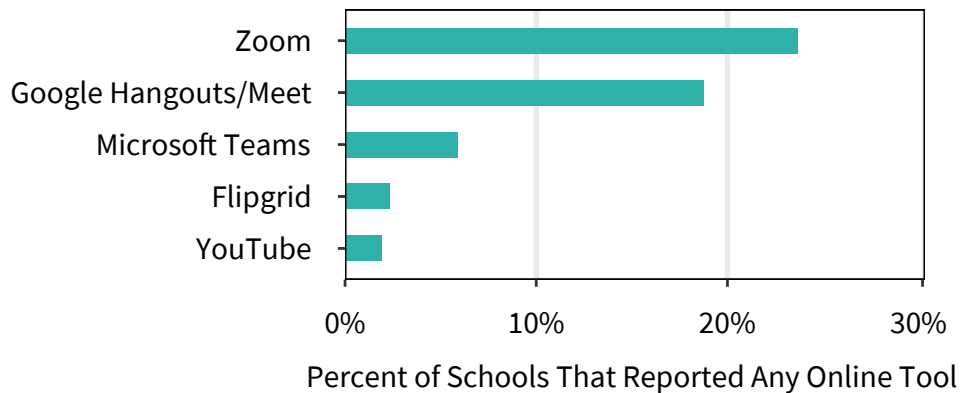
We place the tools into one of three broad categories: learning management tools, video tools, and tutorial/assessment tools. Figures 6-8 below list the top-five most commonly used tools in each category. (As above, the bars shown indicate the percentage of schools that had a website with COVID-related information that used each tool.) Given that not all schools report the online tools on their websites (see earlier discussion), we are most interested here again in the patterns—which tools are used most often. For example, it appears that Google Classroom is used five times more than any other learning management system.

**Figure 6. Google Classroom was the most common learning management tool mentioned by far**



With video-based tools, Zoom was the most widely used (24% of schools). However, Google Hangouts/Meet was a close second (19% of schools). Many schools likely adopted Google as the overall platform, using both Google Classroom and Google Hangouts/Meet.

**Figure 7. Zoom was the most common video tool mentioned**

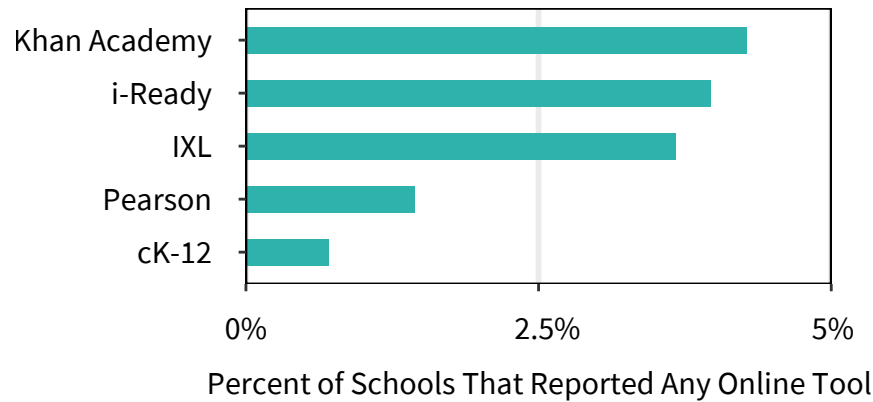


As with learning management tools, the functionality and purpose of these tools varies. In particular, Zoom and Google Hangouts/Meet are meant more for live interaction and interaction between students, teachers, and counselors, while YouTube, for example, is used almost strictly for recorded videos. These recordings can include both the teachers themselves and other videos that teachers might direct students to watch.

Compared with learning management and video tools, there is a much larger number of tools that provide tutorials and assessments (Figure 8, next page), but each is reported by a much smaller number of schools. Khan Academy had the highest number of mentions at 4%. More so than learning management and video tools, the use of specific tutorial/assessment tools is probably significantly under-counted because these vary by grade, subject, and teacher. Teachers might, for example, have provided guidance to students about which of these tools to access by communicating through Google Classroom or another learning management tool, which apply to all students. But the tutorial/assessment tools often do not apply to all students. While the specific percentage of

schools using these tools is no doubt higher than what we report, the relative frequency of their use is reinforced by survey reporting that Google Classroom, Zoom, and Khan Academy are the most commonly used online tools.

**Figure 8. Khan Academy was the most common tutorial/assessment tool mentioned**



Finally, there are two commonly used tools that did not fall into the three categories above: Class Dojo, which can be used to communicate with parents and reward children with points for good behavior (used by 9% of schools), and Remind, which is also used to communicate with parents and students (used by 4% of schools).

## Concluding Thoughts

The goal of this analysis has been to provide new and more detailed evidence about how schools responded to the COVID crisis. Website data can be collected quickly, which is important in the midst of a crisis, but these data are also reported unevenly, especially by school sector. We take many different steps, noted above, to try to reduce these problems. The fact that we see no obvious differences between our results and related survey evidence suggests that these methods were probably effective.

This research is designed to complement other research being done on schools during this crisis. The accompanying technical report provides a review of research, mostly from parent and educator surveys. These surveys are particularly important because they gauge what students are actually experiencing.

Our conclusions in many ways reinforce concerns raised in prior studies. In particular, there are several reasons to think that educational opportunity gaps are rising. Schools responded differently by the level of parent education, and we find that internet access was a significant predictor of school responses to the crisis. Many students face more than one of these disadvantages. Some students, for example, live in homes without internet access and where parents lack degrees and have jobs that force them to work outside the home, so they cannot support home learning.

There are steps that can be taken at various levels of government, and within all types of schools, to address these challenges. Expanding high-speed internet access is perhaps the most obvious example, but it is not the only one. We hope this evidence helps inform these decisions as education leaders ponder whether and how to re-open school buildings in the fall.

## **About the National Center for Research on Education Access and Choice (REACH)**

Founded in 2018, REACH provides objective, rigorous, and applicable research that informs and improves school choice policy design and implementation, to increase opportunities and outcomes for disadvantaged students. REACH is housed at Tulane University with an Executive Committee that includes researchers from Tulane, Michigan State University, Syracuse University, and the University of Southern California.

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## **Corresponding Technical Paper**

Douglas N. Harris, Daniel Oliver, Lihan Liu, Cathy Balfe, Sara Slaughter, and Nicholas Mattei. "How America's Schools Responded to the COVID Crisis." National Center for Research on Education Access and Choice, 2020.