WISCONSIN POLICY FORUM

WHERE LEARNING WENT VIRTUAL

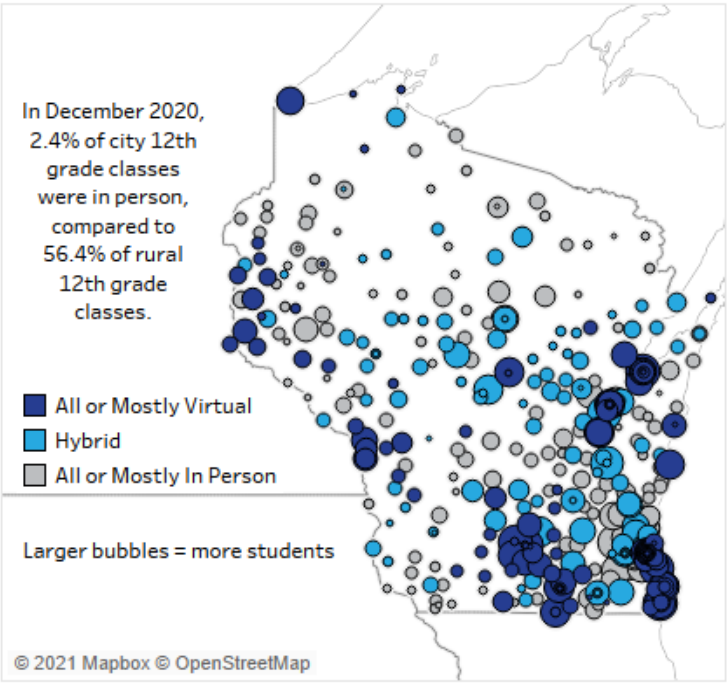
When classes resumed last fall, urban schools with greater shares of students of color were more likely to offer virtual instruction than their suburban or rural counterparts with more white students, raising questions about the widening of racial achievement gaps. As the pandemic intensified from September into December, new state data also show an increase in virtual instruction for all types of schools, particularly those in the suburbs.

For months, policymakers and citizens have sought greater understanding of which schools and students in Wisconsin have switched wholly or partially to virtual instruction, in part to consider whether the shift has impeded learning and widened racial and socioeconomic achievement gaps.

Some answers can be found in new state survey data covering about four out of every five public and private schools in Wisconsin that participate in the National School Lunch Program. The data show that in December, 80% to 90% of responding urban schools (depending on the grade) had all or mostly virtual instruction. In contrast, 40% to 50% of suburban and 14% to 18% of rural schools responded similarly (Figure 1). This shows the extent to which schools in the state continued to use virtual or distance learning, which began last March when Gov. Tony Evers suspended in-person learning for all schools through the end of the 2019-20 year. Though imperfect, the data underscore the need for policymakers to probe the effects of this shift and seek to address any harmful consequences they may find.

Figure 1: City Schools Went Virtual

December 2020 12th grade attendance mode by high school



Source: WI Department of Public Instruction and Department of Health Services

The data were gathered by the Department of Public Instruction (DPI) and Department of Health Services (DHS) as part of a federally-funded program to provide replacement meals through electronic P-EBT cards to families with students who are eligible for free or reduced price lunch and breakfast but cannot receive those meals in person. The data are by individual school, not by district, and can be ambiguous. For example, if a grade in a school is marked as 40% virtual, that could mean either all students are attending class virtually two days per week by school policy or most students are attending class in person five days a week but 40% of students have chosen an option to attend virtually full-time. It may also mean that a quarantine is in effect for a grade or school.

The data are available by grade and month from August to December 2020 – data for the early months of 2021 are not yet available. We used it to examine kindergarten through 12th grade for the 79.5% of schools that responded. Though the survey of school nutrition officers was not designed to address the question of potential learning loss, we approach it here through that lens because no other known data for schools around the state are available on this critical question.

DISPARITIES ACROSS SCHOOLS

In addition to the P-EBT data, we used data from both DPI and the National Center for Education Statistics to examine how student attendance at Wisconsin's schools differed by race, income, public versus private schools, and locale (i.e. urban, rural). Two main trends emerge from the monthly data.

First, statewide school attendance became increasingly virtual throughout the last four months of 2020 as coronavirus cases surged. According to data gathered by the New York Times, the seven-day average of confirmed COVID-19 cases in Wisconsin rose dramatically from 748 on September 1 to 4,644 on November 1 before easing slightly to 4,275 on December 1. The increase in virtual learning – likely by school policy but also potentially to some degree based on more families choosing that option – appears to be a response to the course of the pandemic, with precautions rising along with cases.

Additionally, certain types of schools tended to operate more virtually or have more students learning virtually than others. These included urban schools, schools with a majority of students of color, public schools, and schools with a majority of students on free or reduced price lunch. Again, these schools either shifted more to all or partial virtual instruction or more families at these schools chose a virtual learning option.

Public versus Private Schools. We looked at which schools had regular in-person instruction – defined as schools where students were typically either all or almost all attending in person with fewer than 10% choosing a virtual learning option if one was available. In December 2020, at least three out of every five private schools had students in every grade (kindergarten through 12th grade) receiving regular in-person instruction. Conversely, that was only the case in about 35% to 45% of public schools (see Figure 2). Notably, the data cover only the private schools participating in the National School Lunch Program – the majority do not and may differ from those that do.

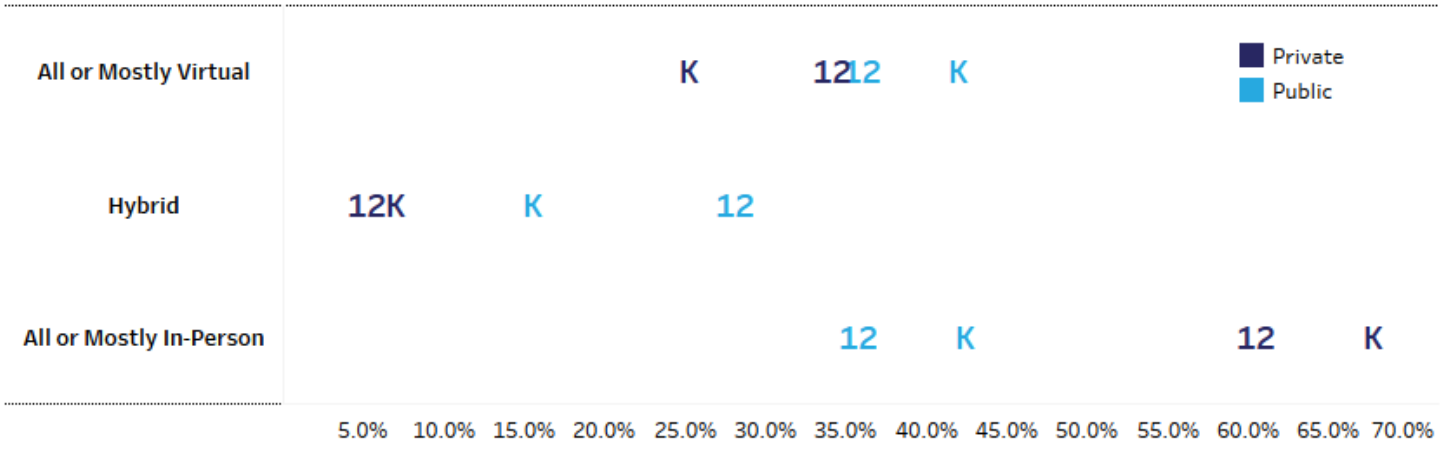
A number of factors could have influenced the approach chosen by school officials as well as parents. Those include the severity of the pandemic locally, the state of local infrastructure such as school buildings and broadband, and the preferences of district leaders and stakeholders such as parents and employees. This brief is not seeking to evaluate the decisions made by schools and parents but rather to document them and advance the discussion about their potential impact.

"Hybrid" learning – in which either all students go to school in person on some days and virtually on others or some students choose a fully virtual option – was used more by public schools. For example, in public schools in December, 28.2% of 12th-grade instruction, 20.8% of eighth-grade instruction, and 15.6% of kindergarten instruction implemented a hybrid model, compared to 5.3%, 6.9%, and 7.0% of private school instruction in these respective grades.

Figure 2: Public School Instruction More Virtual, Hybrid than Private

% of grades with each policy in December, by grade level* and type of school

Mouse over for more information



Source: Wisconsin Department of Public Insturction and Department of Health Services

* Includes Kindergarten and 12th Grade

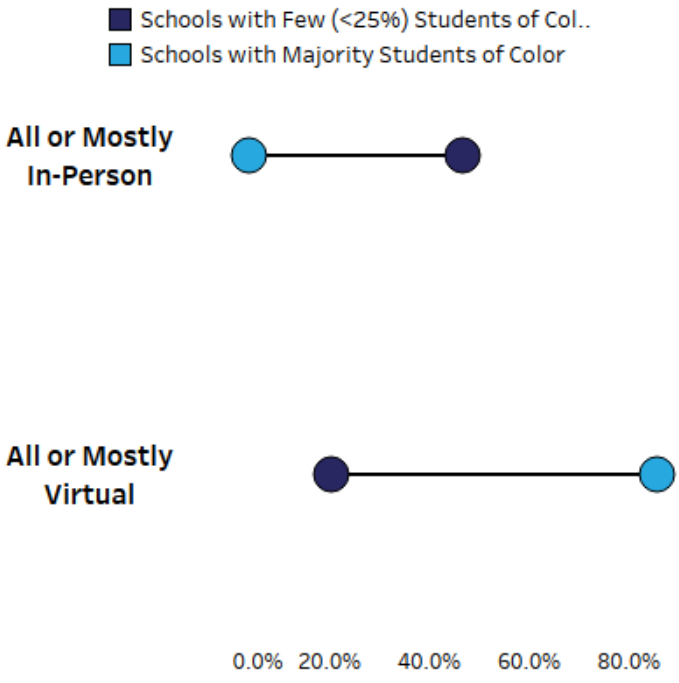
Private school instruction was also less likely to shift to a virtual setting as COVID cases rose. The percentage of public schools with 12th graders regularly attending class in person declined from 48.3% in September to 35.8% in December – a 13 percentage point drop; private schools sent their 12th grade classes to school buildings at a rate of 63.2% in September and 60.5% in December, a drop of just 3 percentage points.

Locale. Disparities in school attendance were perhaps the largest by locale. In December 2020, just 2.4% of urban public schools regularly had their 12th graders attending school in-person, compared to 30.2% of suburban schools, 29.2% in schools located in towns, and 56.4% in rural schools. This 54 percentage point gap between urban and rural schools was reflected similarly for elementary-aged students (9.8% of urban fifth grades had regular in-person instruction versus 67.4% of rural fifth grades) and middle school-aged students (2.0% of urban eighth grades versus 62.8% of rural eighth grades regularly in-person). Perhaps because of their greater use of all virtual instruction, urban schools were also the least likely to use a hybrid learning model.

While school instruction across all locales became more virtual late last year, the shift was most pronounced in suburban schools. From September to December, there was a 12 percentage point increase in statewide public schools with all or mostly virtual instruction for the 12th grade (from 24.2% to 36.0%). In suburban schools, the increase was from 25.4% to 44.4%, or 19 points.

Figure 3: Students of Color More Likely Learning Virtually

% of schools by policy, 12th grades in December 2020



Source: WI Department of Public Instruction and Department of Health Services

Students of Color and Low-Income Students. Similar differences were found when comparing schools with few students of color (defined here as less than 25%) to schools that enroll a majority of students of color. In December 2020, depending on the grade, only 17% to 22% of schools with few students of color were all or mostly virtual, compared to 85% to 90% of schools with a majority (see Figure 3). The trend was similar throughout the fall. Fewer schools with a majority of students of color also used hybrid learning.

There were also differences between schools with less than 25% of students qualifying for free and reduced-price lunch and schools with a majority of students in this category. However, the disparities were not nearly as pronounced as they were by race and locale.

CONCLUSION

Though virtual learning appears to have diminished this spring, it was used extensively last fall and has continued to some degree, particularly in large urban districts. The full impacts of this shift away from in-person learning in Wisconsin are not yet known and may differ by school, student, and subject.

However, early indications raise questions about the potential effects. Along with the rise of virtual learning, some Wisconsin districts have reported substantial increases in measures of student academic failure, and national studies also point to students losing ground academically. Notably, the data analyzed here show the shift toward virtual learning disproportionately impacted students of color and students receiving free and reduced price lunch (although to a lesser extent).

That is potentially problematic for multiple reasons, starting with the achievement gaps these students already faced prior to COVID-19. As we noted in May, students of color also have less access to the Internet. Though districts and the state have tried to remedy the problem, the need for greater numbers of these students to rely on virtual learning may have impacted them to a greater extent than white students.

Because the crisis also curtailed standardized testing, the state has received less information about student

performance over the past year. Policymakers should consider how to bridge that knowledge gap and examine the impacts of virtual instruction, particularly on the most vulnerable students. This may lead them to consider remediation strategies such as expanded summer school, extended school hours during afternoons or weekends, smaller class sizes, intensive tutoring, and outreach to struggling students.

Finally, it is important to note that schools are receiving a massive influx of federal relief funds in the coming months. Addressing the potential impacts of virtual schooling on students should be one important consideration for policymakers as they mull how to use these revenues effectively.