

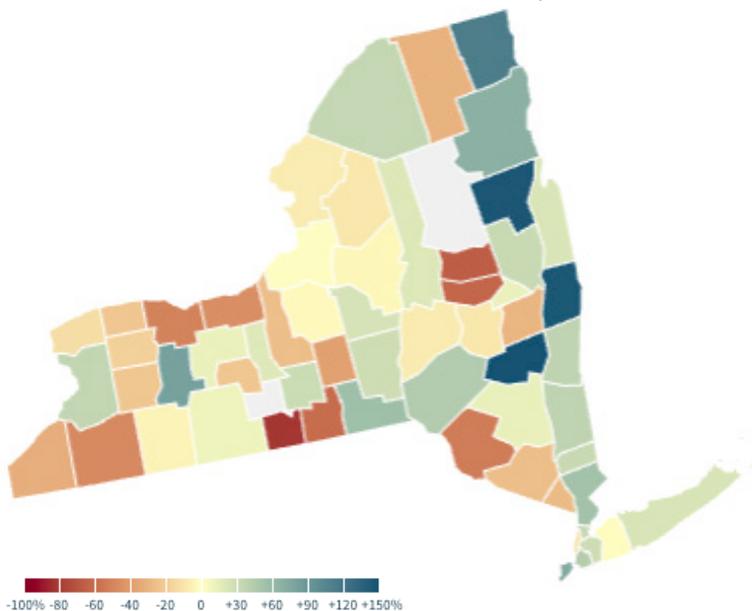
County Variations in Student Distance Learning

Local data is critical for informing effective policy responses. Despite this, current information on the economic and social impacts of COVID-19 has been largely limited to state-level aggregations or has not had consistent information so as to compare across locations. **The Economic Tracker provides county and metro-level data that can support policymakers' understanding of where policy responses are working and where more help is needed.** A closer look at how student online course participation varies across counties illustrates the power of more granular, localized data, and suggests new approaches to targeting policies to address potential education disparities.

APPLICATION: ONLINE COURSE PARTICIPATION

The COVID-19 pandemic has led to widespread school closures across the United States. These closures have significantly disrupted regular learning in most schools and caused many to shift toward online learning platforms. Such programmatic changes necessitate accurate and granular data to highlight any differential impacts at the local level, particularly as policymakers work to address potential

PERCENT CHANGE IN STUDENT COURSE PARTICIPATION, NEW YORK COUNTIES



disparities brought on by these changes. The Economic Tracker features online usage data from Zearn Math, a math program normally used in classrooms that combines hands-on instruction with digital lessons. Using the Online Math Participation series, we can compare county-level course participation rates across geographies and over time. The map below of New York state shows how student participation in online math coursework changed from early January to the week of April 27th among schools using Zearn.

This map highlights that several counties in northeastern New York and around New York City have seen increased or steady student course participation, whereas a number of counties in the western and central parts of New York state have seen declines over this period. Even while the statewide trend has remained relatively flat, these county breakdowns indicate differential local impacts.

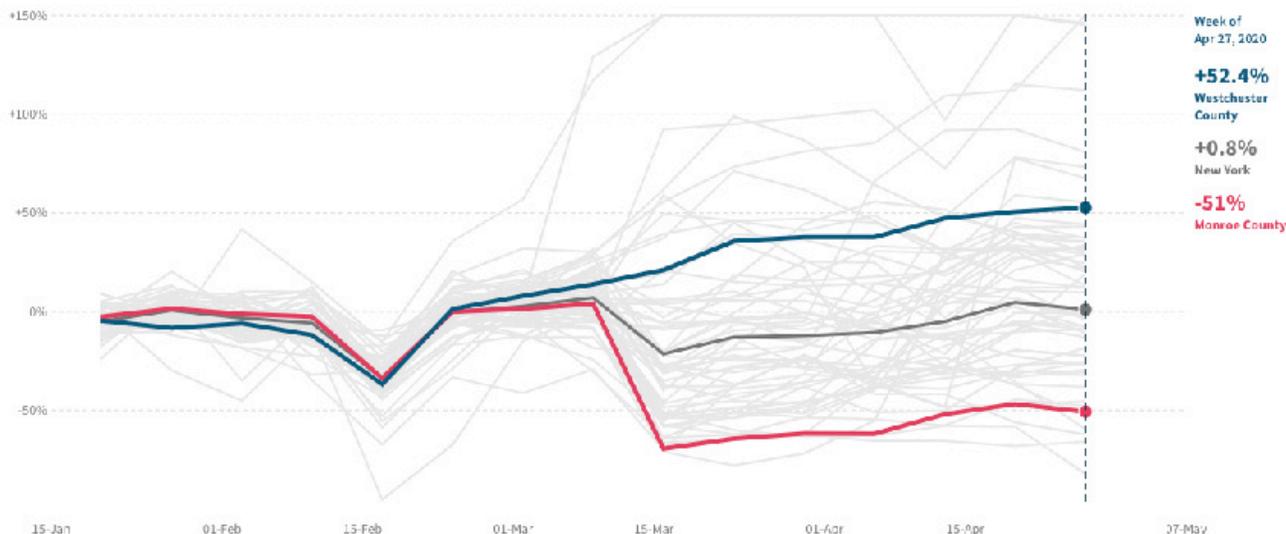
AMONG EXISTING SCHOOL USERS FOR THE WEEK OF APRIL 27TH, COMPARED TO JANUARY 2020

Plotting county-level participation over time underscores these local variations. While course participation from students in Westchester County and Monroe County was similar throughout January and February, participation in Monroe County fell steeply in March whereas participation in Westchester County grew. These divergent patterns coincide with the timing of New York's school closures and may reflect broader disparities in New York state (and nationally) in course participation by area income. Such insights into county trends gives us a clearer sense of the direction and difference in student outcomes that would be otherwise masked by state-level aggregations.

ABOUT THE ECONOMIC TRACKER

How is the COVID-19 pandemic affecting the economic prospects of people, businesses, and communities across the United States? Traditional economic indicators lack the timeliness and granularity needed to answer these questions rapidly. The Opportunity Insights Economic Tracker combines aggregate, de-identified data from leading private companies – from credit card processors to payroll firms – to provide a real-time picture of indicators such as employment rates, consumer spending, and job postings across counties, industries, and income groups. Rather than waiting weeks to see where the economy is falling and playing catch-up, the tracker offers the capacity to spot economic problems as they emerge and develop targeted, evidence-based policy responses – providing a powerful new tool for economic policy in the age of big data.

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AMONG EXISTING SCHOOL USERS, COMPARED TO JANUARY 2020

POLICY IMPLICATIONS

Real-time, county-level data is an important touchstone for state and local policymakers to understand community needs. Decreased participation in online math coursework may be a sign that schools in certain counties and communities have more difficulty keeping their students engaged while schools are closed. Online course participation data from Zearn shows that at state and national levels, course participation rates are lower among students from schools in low-income zip codes than among their higher-income counterparts. It may be the case that more adults in low-income zip codes are in “essential” occupations that require them to continue to work outside the home, leaving them with less time at home to support their children’s transition to out-of-classroom learning routines. Households in low-income communities may also have lower levels of access to computers and technologies that facilitate online learning. Some communities may struggle with broadband access more generally. Other communities may face challenges unique to their own local contexts. Being able to pinpoint the specific counties where student engagement is waning may help policymakers begin to identify the specific barriers that communities face while trying to support families and children during the pandemic.

Broadly and over the longer-term, policymakers will be able to use the range of county-level data from the Economic Tracker to identify which areas have been most impacted by COVID-19 shocks, how recovery is evolving, and how local resources and policies may be best deployed to support long-term economic health.

ON THE HORIZON

We look forward to continuing to add data and functionalities to the Economic Tracker. Anticipated additions include:

- Data that are available at smaller geographic levels and for specific demographic subgroups so as to support needs assessments and policy targeting.
- Data to reflect additional dimensions of consumer spending and credit, social outcomes, business response, and other areas, that can offer increasingly comprehensive insights into community experiences and policy responses.
- Data that capture longer time periods that can reveal recovery patterns and serve as a longer-term policy tool.

CONTACT

Requests for additional information on the data or technical questions can be directed to info@opportunityinsights.org.

We’d love to hear how you’re using our tool to inform the economic recovery in your community. Tweet us @Opplnsights or email us to tell us more.

ABOUT OPPORTUNITY INSIGHTS

Opportunity Insights is a non-partisan, not-for-profit organization located at Harvard University that seeks to translate insights from rigorous, scientific research to policy change by harnessing the power of “big data” using an interdisciplinary approach.