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Research Brief

Movers, Switchers, and Exiters: Teacher Turnover during COVID-19

Andrew Camp[†], Gema Zamarro, and Josh McGee

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[†]**Corresponding Author:** Andrew Camp, Department of Education Reform, University of Arkansas, Fayetteville, AR 72701. ac103@uark.edu

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MOTIVATION

The COVID-19 pandemic has placed an undeniable strain on teachers. Since the start of the pandemic in the spring of 2020, research has consistently found that levels of stress and burnout among teachers have been at exceptionally high levelsⁱ. As schools began to reopen during the fall of 2020, teachers had to adapt to unexpected conditions by teaching in unprecedented ways and often balancing synchronous and asynchronous instruction. As a result of these unprecedented levels of stress and burnout, many have expressed concerns about the potential for increased teacher turnover and widespread teacher shortagesⁱⁱ.

Analyses of teacher turnover using administrative data have largely found that these concerns did not materialize during the first two pandemic school years (2020-21 and 2021-22)ⁱⁱⁱ, but recent reports from Washington State, North Carolina, and South Carolina show signs of sharp increases in turnover entering the current school year (2022-23)^{iv}.

In this brief, we examine teacher turnover in the state of Arkansas both before and during the COVID-19 pandemic. In line with available reports from Washington State, North Carolina, and South Carolina, we find evidence of increased teacher turnover in Arkansas entering the current school year. However, a large proportion of this turnover can be explained not by teachers leaving the education sector but switching to non-instructional roles such as principals or instructional coaches. The use of Elementary and Secondary School Emergency Relief (ESSER) funds may be driving these transitions. A survey of schools conducted by the National Center for Education Statistics in January of 2022 found that 30% of vacancies were newly created positions^v. We additionally find that many of those teachers who did leave the education sector did not find immediate employment in other sectors which may indicate that these teachers might be more likely to return to the teaching profession if their concerns are addressed.

DATA

To examine teacher turnover and mobility during the COVID-19 pandemic, we use administrative data provided by the Arkansas Department of Education and maintained by the Office of Education Policy in the Department of Education Reform at the University of Arkansas. These data cover the universe of traditional public and charter school employees for the 2013-14 through 2022-23 school years and allow us to track individual teachers throughout their time in the Arkansas education workforce. Importantly, these data allow us to follow teachers who switch to non-instructional roles such as a principal or instructional coaches. To gain insight into teachers' labor market outcomes after leaving the education

sector, we link these data to quarterly unemployment insurance records through the end of the 2021 calendar year.

While any turnover may have negative consequences for students' academic outcomes^{vi}, what teachers do after they leave their school or classroom has important implications for the health of the state's teacher workforce and the design of policy responses to address turnover. If teacher turnover is characterized largely by teachers moving between schools, an effective policy may need to provide targeted solutions to reduce this "churn." Conversely, if turnover is largely caused by teachers exiting the education sector workforce, policymakers will instead need to focus on efforts to boost overall retention and ensure a robust early career pipeline.

To capture these important differences in types of teacher turnover, we distinguish between four possible outcomes for teachers entering each school year:

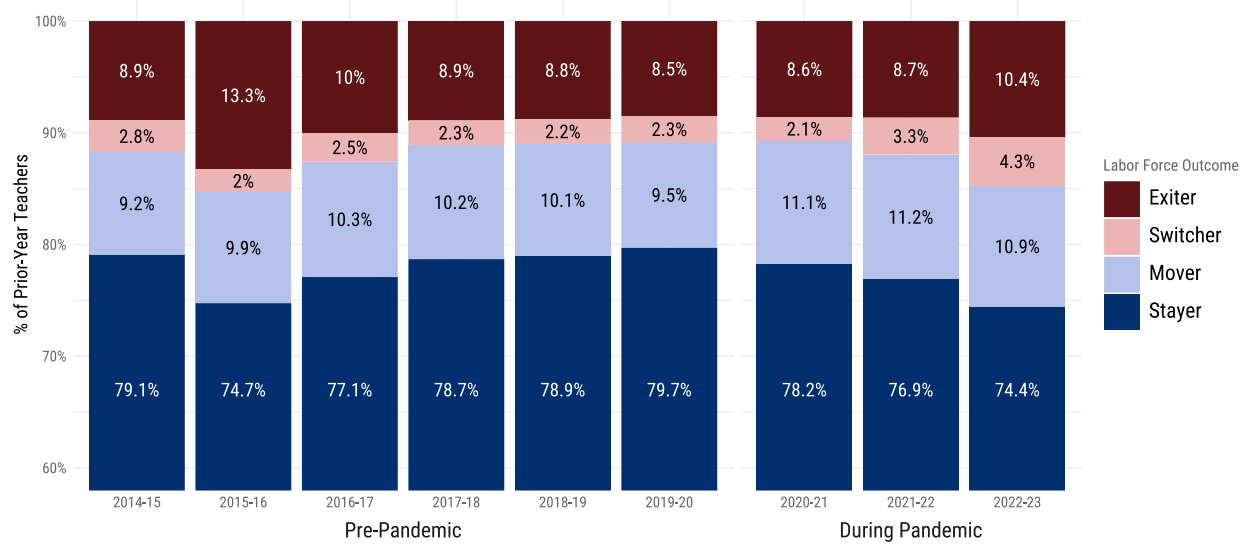
- **Exiters** are teachers who leave the Arkansas education workforce entirely and do not work in any school.
- **Switchers** change from a teaching to a non-instructional role from one year to the next.
- **Movers** leave their current school(s) to teach in another school or district.
- **Stayers** remain in a teaching role at their current school(s) from one year to the next.

RESULTS

Changes in Overall Turnover

We first examine turnover both before and after the beginning of the COVID-19 pandemic in figure 1, below, where the bottom bars represent the overall retention rate (Stayers) and the top three bars constitute total teacher turnover (Exiters, Switchers, and Movers). Before the pandemic, the retention rate for teachers in Arkansas public schools was approximately 78%. While turnover appeared stable entering the first pandemic school year (2020-21), we see a moderate increase in turnover, of about 3 percentage points compared with 2019-20, entering the second pandemic school year (2021-22) followed by a larger increase, of about 5 percentage points compared with 2019-20, entering the 2022-23 school year.

Figure 1 - Arkansas Teacher Turnover and Retention Over Time



Importantly, the composition of teacher turnover has changed during the pandemic period. Starting in 2020-21, we observe a slight increase in the proportion of teachers moving between schools or districts. Entering the 2021-22 school year, this increase continues and is accompanied by a 1.2 percentage point increase in the proportion of teachers switching to non-instructional roles. Given that there are approximately 32,000 teachers in the Arkansas workforce, this change represents an additional 375 teachers leaving the classroom as compared with pre-pandemic trends. Interestingly, and in contrast with much of the media coverage of teaching during the pandemic, we do not observe a notable increase in the proportion of teachers exiting the education workforce during the first two pandemic school years.

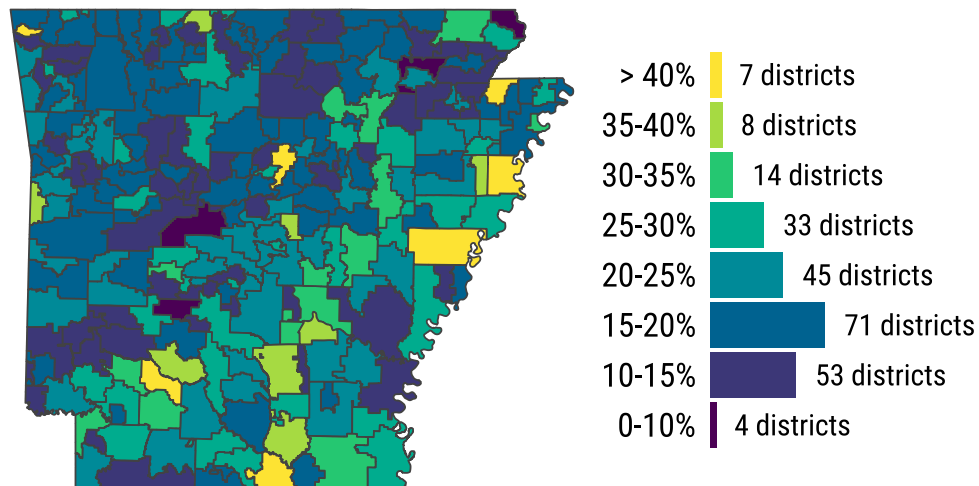
However, entering the current school year (2022-23), we observe a relatively large increase in turnover. This increase stems from an increase of approximately 2-percentage points in the proportion of teachers who switch to non-instructional roles and a 2-percentage point increase in the proportion of teachers who exit the education workforce entirely. Together, these increases indicate that about 1,250 teachers more teachers left the classroom than we would have expected in an average pre-pandemic year.

Variation in Turnover

While statewide turnover averages are informative in the aggregate, they mask important variability within the state. Teacher labor markets are localized^{vii} and different regions of a state often face very different staffing challenges. We present these local differences across school districts in Arkansas in figures 2-5, below. In figure 2, we see that significant differences

in turnover between regions of the state existed before the pandemic with areas of eastern and southern Arkansas facing higher average turnover than areas of central and northern Arkansas. These areas have historically faced the most acute teacher shortages within the state^{viii}.

Figure 2 - Average Teacher Turnover Pre-Pandemic (2013-14 to 2019-20), by District



Entering the 2021-22 school year, shown in figure 3, we see increases in turnover statewide, although the largest increases appear to occur in eastern and southern Arkansas, the areas that face greater challenges finding teachers. This trend continues entering the 2022-23 school year, shown in figure 4. While before the pandemic only 7 districts had average turnover rates above 40%, entering the current school year we observe that 22 districts have turnover rates greater than 40%.

Figure 3 - Average Teacher Turnover Entering the 2021-22 School Year, by District

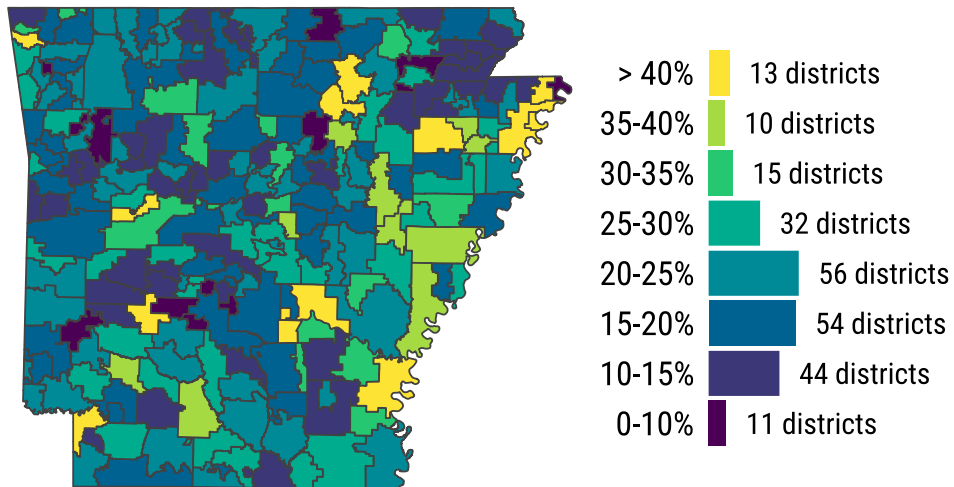
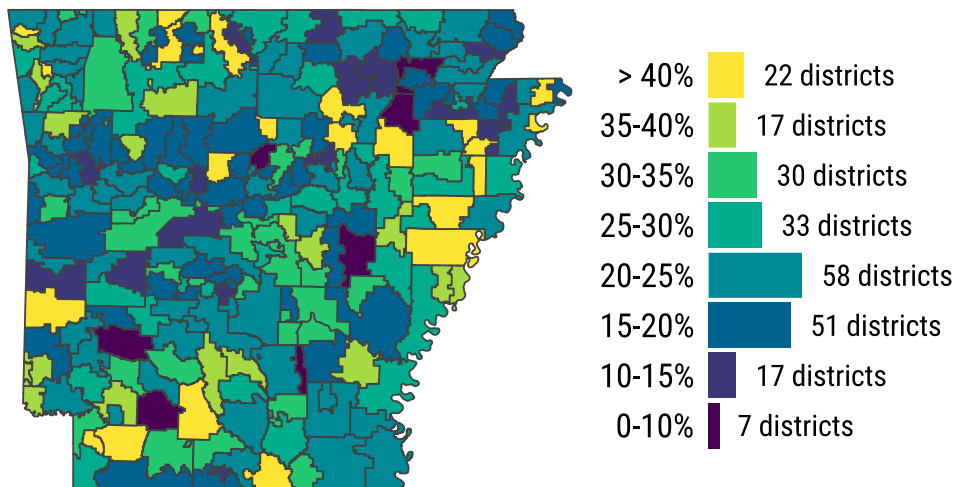


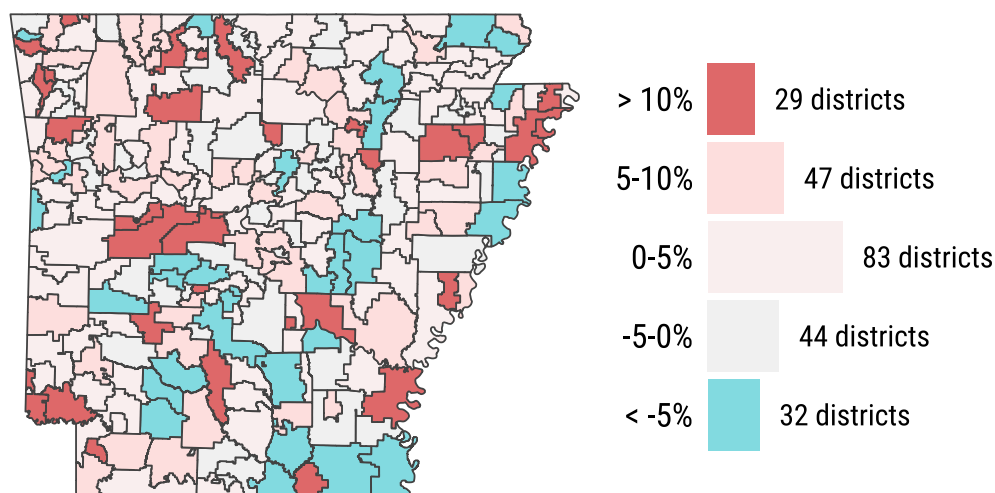
Figure 4 - Teacher Turnover Entering the 2022-23 School Year, by District



Although many districts throughout the state have experienced increases in teacher turnover and consistently high turnover, this has not been a uniform trend. We visualize differences in average turnover before the pandemic (entering the 2014-15 through 2019-20 school years) versus during the pandemic (entering the 2020-21 through 2022-23 school years) in figure 5. Statewide, 32 districts (including some with persistently high levels of turnover before and during the pandemic) have seen a decrease of 5% or more in average turnover since the start

of the 2020-21 school year. In contrast, 29 districts have seen an increase in average turnover of 10% or greater.

**Figure 5 - Changes in Teacher Turnover Pre-Pandemic (2014-15 to 2019-20)
vs. During Pandemic (2020-21 to 2022-23), by District**



Where Have the Teachers Gone?

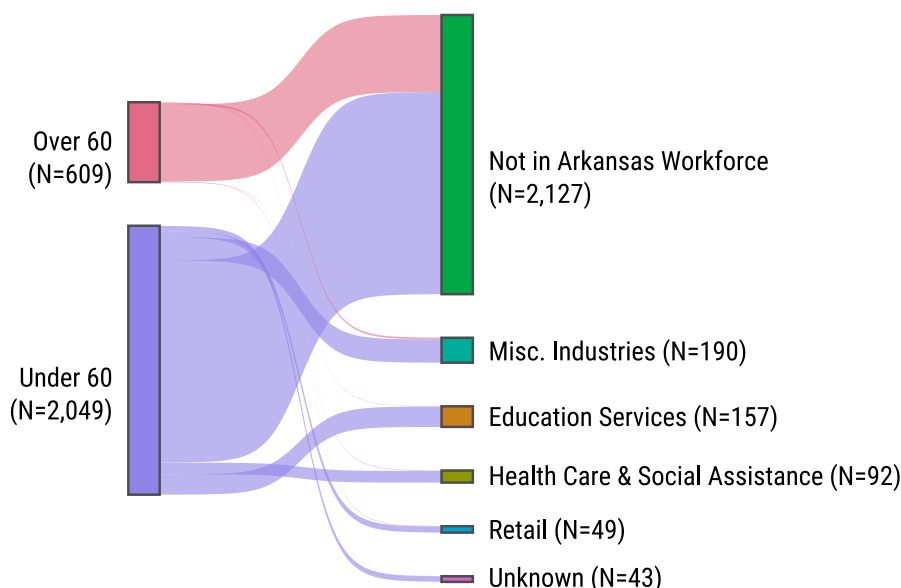
Analysis of teacher turnover during the COVID-19 pandemic from other states have documented similar patterns in overall turnover but have been unable to determine if exits from the state teacher labor force are caused by individuals leaving the workforce entirely (i.e., not working in any role) or leaving the education sector in favor of other jobs.

In figure 6, below, we present employment outcomes for the cohort of Exiters during the Fall of 2021 over a period of approximately 6 months after they ceased working as a teacher (i.e., from July to December of 2021). While our unemployment insurance data only cover through the end of the 2021 calendar year, we intend to follow these cohorts in future analyses. As employment decisions may be different for individuals approaching retirement than those who are still of working age, we display transitions separately for Exiters over and under the age of 60.

We see that the majority of Exiters (80%) in this cohort do not appear as an employee at any unemployment insurance-covered employer in the state. Of those Exiters aged 60 or more, only 25 (4%) appear in the Arkansas workforce while 25% of Exiters under the age of 60 do. We further explore where Exiters that remain in the Arkansas workforce find employment according to the NAICS industry code provided in the unemployment insurance records^x. A large proportion of Exiters who find employment occupy roles in the education services

industry, such as working at a post-secondary institution, as a tutor, or as a consultant. The next most common industries for Exiters in the Arkansas workforce are health care and social assistance followed by retail.

Figure 6 - Labor Force Outcomes of Exiters Entering the 2021-22 School Year



DISCUSSION

Although the COVID-19 pandemic has abated, the lasting impact of these past few years will be felt for decades to come. Research has indicated that low-income and minoritized students have faced the brunt of COVID-19 induced learning losses^x, and estimates indicate that students nationally may incur a 5.6 percent reduction in lifetime earnings and a nearly 100-billion-dollar loss in GDP for Arkansas alone^{xi}. Efforts to ameliorate these losses largely rely upon teachers. However, staffing has been a common challenge^{xii} in implementing these interventions.

We find evidence that these staffing challenges may continue after the health risks posed by COVID-19 have subsided. Although teacher turnover was not at unprecedented levels during the first two pandemic school years, turnover in Arkansas entering the 2022-23 school year is on par with the highest levels the state has seen in the past decade. However, these impacts have not been uniform across the state with some districts experiencing reductions in average turnover during the pandemic while others have faced marked increases. Additionally, approximately half of this turnover is explained by teachers leaving the

classroom to work in non-instructional roles, such as an instructional coach. In ongoing research, we have found that the allocation of ESSER funds towards activities that include creating new positions is moderately correlated ($\rho = 0.11$), although this is an area for future study.

Despite these concerning findings, 80% of teachers who left the classroom in the fall of 2021 did not immediately find employment in outside industries. This may be somewhat positive news as it indicates that these teachers were not induced to leave the education sector by higher-paid roles but rather by other factors, potentially including job dissatisfaction and working conditions. Efforts to improve teacher working conditions and otherwise address the concerns of these former teachers may be successful in inducing these individuals to return to the classroom and alleviate potential shortages.

ⁱ Elizabeth D. Steiner and Ashley Woo, *Job-Related Stress Threatens the Teacher Supply: Key Findings from the 2021 State of the U.S. Teacher Survey* (RAND Corporation, 2021), <https://doi.org/10.7249/RR1108-1>; Gema Zamorro et al., "Understanding How COVID-19 Has Changed Teachers' Chances of Remaining in the Classroom," EDRE Research Brief (University of Arkansas, August 2021), https://edre.uark.edu/_resources/pdf/teacher_turnover_covid.pdf.

ⁱⁱ Emma Goldberg, "As Pandemic Upends Teaching, Fewer Students Want to Pursue It," *The New York Times*, April 7, 2021, <https://www.nytimes.com/2021/03/27/us/covid-school-teaching.html>; Lesley Lavery, "The Pandemic Is Causing Teachers to Flee the Profession.," *Salon*, December 19, 2020, <https://www.salon.com/2020/12/19/the-pandemic-is-causing-teachers-to-flee-the-profession/>.

ⁱⁱⁱ Andrew Bacher-Hicks, Olivia L. Chi, and Alexis Orellana, "Two Years Later: How COVID-19 Has Shaped the Teacher Workforce," *Educational Researcher*, February 27, 2023, 0013189X2311536, <https://doi.org/10.3102/0013189X231153659>; Dan Goldhaber and Roddy Theobald, "Teacher Attrition and Mobility in the Pandemic," *Educational Evaluation and Policy Analysis*, December 12, 2022, 016237372211392, <https://doi.org/10.3102/01623737221139285>; Keven C. Bastian and Sarah Crittenden Fuller, "Teacher and Principal Attrition During the COVID-19 Pandemic in North Carolina," Policy Brief, Education Policy Initiative at Carolina (Chapel Hill, NC: The University of North Carolina at Chapel Hill, June 2021), <https://epic.unc.edu/wp-content/uploads/sites/1268/2021/09/Teacher-and-Principal-Attrition-During-the-COVID-19-Pandemic-in-North-Carolina-June-2021.pdf>.

^{iv} Melissa K. Diliberti and Heather L. Schwartz, *Educator Turnover Has Markedly Increased, but Districts Have Taken Actions to Boost Teacher Ranks: Selected Findings from the Sixth American School District Panel Survey* (RAND Corporation, 2023), <https://doi.org/10.7249/RR1956-14>; Dan Goldhaber and Roddy Theobald, "Teacher Turnover Three Years Into The Pandemic Era: Evidence from Washington State," CALDER Policy Brief (Arlington, VA: Center for Analysis of Longitudinal Data in Education Research, February 2023), <https://caldercenter.org/sites/default/files/CALDER%20Policy%20Brief%2032-0223.pdf>; Keven C. Bastian and Sarah Fuller, "Educator Attrition and Hiring in North Carolina Public Schools During the COVID-19 Pandemic," EPIC Insights (Education Policy Initiative at Carolina, February 2023), <https://epic.unc.edu/wp-content/uploads/sites/1268/2023/02/Educator-Attrition-and-Hiring-in-NC.pdf>; CERRA, "South Carolina Annual Educator Supply & Demand Data Tables, 2022-23" (Center for Educator Recruitment, Retention, & Advancement: Winthrop University, November 2022), https://www.cerra.org/uploads/1/7/6/8/17684955/supply___demand_data_tables_2022-23.pdf.

^v Institute of Education Sciences, “School Staffing Shortages: Results from the January School Pulse Panel,” School Pulse Panel (Institute of Education Sciences, June 2022), https://ies.ed.gov/schoolsurvey/spp/2022_SPP_Staffing.pdf.

^{vi} Eric A. Hanushek, Steven G. Rivkin, and Jeffrey C. Schiman, “Dynamic Effects of Teacher Turnover on the Quality of Instruction,” *Economics of Education Review* 55 (December 2016): 132–48, <https://doi.org/10.1016/j.econedurev.2016.08.004>.

^{vii} Edwards et al., “Teacher Shortages: A Unifying Framework for Understanding and Predicting Vacancies,” November 2022, <https://doi.org/10.26300/8T5B-2302>.

^{viii} Arkansas Department of Education, “Geographical Teacher Shortage Area List 20-21” (Little Rock, Arkansas: Arkansas Department of Education, August 26, 2020), https://static.ark.org/eeuploads/adhe-financial/Shortage_Areas_for_ADHE_8.26.2020.pdf.

^{ix} NAICS Association, NAICS Association, n.d., <https://www.naics.com/>.

^x Dan Goldhaber et al., “The Consequences of Remote and Hybrid Instruction During the Pandemic” (Cambridge, MA: National Bureau of Economic Research, May 2022), <https://doi.org/10.3386/w30010>.

^{xi} Eric A. Hanushek, “The Economic Cost of the Pandemic: State by State” (Stanford, CA: Hoover Institution, 2023), <http://hanushek.stanford.edu/publications/economic-cost-pandemic-state-state>.

^{xii} Maria V. Carbonari et al., “The Challenges of Implementing Academic Interventions During COVID: Evidence from the Road to Recovery Project” (Cambridge, MA: Center for Education Policy Research, Harvard University, December 2022), https://cepr.harvard.edu/sites/hwpi.harvard.edu/files/cepr/files/the_challenges_of_implementing_academic_covid_recovery.pdf?m=1677190353.