Chapter 1

The Great Disruption

The Severe Acute Respiratory Syndrome Coronavirus 2, more commonly referred to as SARS-CoV-2 or COVID-19, originated in Wuhan, China, in late 2019 (Zhou et al., 2020). Within months, the once-in-a-generation pandemic spread across the planet. Drastic mitigation efforts ensued, which included universal mask wearing, social distancing, business closings, and working from home (Bourne, 2021). The response to the pandemic had a dramatic impact on education. Schools in the United States closed in 48 states in March 2020 (Marshall, 2022a). Although some schools had already closed locally, Nebraska and Maine were the last two states to formally close schools on April 1 and April 2, 2020, respectively, and schools across the country remained closed for the remainder of the 2019–2020 school year.*

The Unprecedented Shift to Remote Learning

Merriam-Webster's 2020 Word of the Year was *pandemic*. It just as easily could have been *unprecedented*. When schools closed for in-person learning, teachers were forced to teach in ways in which most were never trained (Marshall, Shannon, & Love, 2020), and students were asked to learn in ways to which they were unaccustomed (Carpenter & Dunn, 2020). In some cases, teachers were given mere hours to gather everything they would need for the next 2 weeks, which many initially believed

^{*}Montana and Wyoming were exceptions to this. Statewide school closures ended on May 6, 2020, in Montana ("Bullock's Stay-at-Home Order Lifted," 2020) and May 15, 2020, in Wyoming ("Wyoming Schools to Remain Closed," 2020); however, local school districts could still elect to remain closed, and many districts did for the duration of the school year.

would be the duration of the crisis (Love & Marshall, 2022). At some schools, faculty and staff worked overtime to put together paper-based instructional packets for students to take home—packets that school leaders later conceded were not pedagogically valuable (Marshall & Neugebauer, 2022). Survey research from March and April 2020 suggests that teachers who taught in schools that relied on instructional packets experienced the lowest professional self-efficacy during this time (Marshall, Shannon, Love, & Norris, in press). Elsewhere, learning pivoted from face-to-face to online in a matter of days (Kaden, 2020; Love & Marshall, 2022). Scholars have been careful to describe this as "emergency remote teaching" instead of "online teaching"; the distinction is important (Hodges, Moore, Lockee, Trust, & Bond, 2020). Like traditional face-toface teaching, online teaching is a planned exercise in which the lessons, activities, and assessments are aligned and designed with online teaching as the intended mode of delivery. That definition does not describe what occurred in the spring of 2020 (Affouneh, Salha, & Khlaif, 2020; Hodges et al., 2020; Milman, 2020). When schools closed to in-person instruction, teachers were forced to take lessons, activities, and assessments designed for schooling as usual and deliver them remotely—often without the training, materials, or time to do so effectively (Marshall, Shannon, & Love, 2022). Many of the school leaders we interviewed suggested that teachers should take their curriculum, cut it in half, and then cut that in half again (Marshall & Neugebauer, 2022; Vanourek, 2020). So students who remained engaged in their studies were exposed to a fraction of the content they would have been under normal circumstances.

Schools that delivered instruction virtually prior to the pandemic were a noted exception to this. Kingsbury (2021), in survey research, found that parents of students who were enrolled in virtual schools at the time schools were closed for in-person instruction reported substantially better outcomes when compared to those in traditional brick-and-mortar schools who were delivering emergency remote instruction. However, most students learned decidedly less than they should have during the last two months of the 2019–2020 school year.

Reopening Schools for In-Person Learning

Schooling looked quite different across the United States during the 2020–2021 school year. School districts began the year offering one of

the following: fully remote, hybrid, or fully in-person learning. For the purposes of this book, *hybrid* instruction will be defined as instruction delivered to the student partially in person and partially remotely. It is important to note that hybrid instruction looked different across contexts. One example of a hybrid learning modality employed during the pandemic was an A/B plan. Under such a plan, the student body would be divided into two roughly even groups. Group A attended in person on Mondays and Tuesdays and Group B on Thursdays and Fridays. Wednesdays were asynchronous for everyone, allowing for additional cleaning in the school and planning time for teachers. Hybrid teaching should not be confused with hyflex teaching (short for hybrid-flexible), which involves teaching students in person and virtually simultaneously (Bower, Dalgarno, Kennedy, Lee, & Kenney, 2015). Decisions about how and when schools would return in the fall of 2020 were often highly debated across communities at school board meetings during the summer of 2020. These debates ranged from the type of instruction schools would provide to safety protocols that schools would enforce. In the end, every school district offered families an option to choose the learning modality for their child, including remote learning options during the 2020-2021 school year (Marshall & Bradley-Dorsey, 2020)—representing the closest thing to a version of universal school choice that had ever been offered in the United States. For the first time in American history, every family had a choice of how their student would attend school.

Some districts around the United States returned to some form of in-person instruction; however, larger school districts were more likely to begin the school year with remote instruction. According to *Education Week* (EdWeek Research Center, 2022), almost three-fourths (74%) of the 100 largest school districts began the school year with remote instruction.* One analysis found that a school district with 100,000 students was almost 10 times less likely to reopen in person in September 2020 than one with 1,000 students (Marshall & Bradley-Dorsey, 2022). Some school districts, such as New York City, based their decisions to keep schools open on the city's case positivity rates (Heyward, 2021). The case positivity rate was the proportion of total COVID-19 tests administered that

^{*}Hawai'i does not have school districts; all public schools report directly to the Hawai'i Department of Education. These analyses exclude public schools in Hawai'i and the District of Columbia ("School Districts' Reopening Plans: A Snapshot," 2020; Marshall & Bradley-Dorsey, 2022).

were positive (Shapiro & Rubenstein, 2020). This was always a flawed statistic because of the denominator. For example, states such as New York and Connecticut tested a lot. By contrast, states such as Oklahoma generally only gave tests to individuals with symptoms during the fall of 2020. During the week of September 14, 2020, Oklahoma had a case positivity rate of 23%.* That was not so much indicative of how widely the virus spread as, rather, who was getting tested, under what circumstances, and how often. If everyone, including those without COVID-19 symptoms, was tested for the virus, then the positivity rate would be much lower than if only those presenting symptoms were administered the test. In New York City, if the case positivity rate eclipsed 3%, schools would be shuttered based on a deal made between then-Mayor Bill de Blasio and the New York City teachers union (Heyward, 2021). This was much more stringent than the 9% case positivity rate threshold put in place by then-Governor Andrew Cuomo (Shapiro, 2020). Schools were closed for inperson instruction on November 19, 2020, when the case positivity rate rose above the 3% threshold for the first time (Heyward, 2021), only to reopen again on November 29 after parents complained and the mayor abandoned the metric for determining when to close schools (Shapiro, 2020).

School closure and reopening policies were not fixed decisions. Many schools toggled back and forth between learning modalities, especially during the fall of 2020 and winter of 2020–2021. By March 1, 2021, more than 90% of school districts were offering some form of in-person learning. School districts that were small (five or fewer schools), rural, and had less access to broadband internet were the most likely to offer in-person learning, whereas larger, more urban districts, as well as those serving a greater proportion of students of color, were more apt to offer only remote learning. Counties with higher rates of mask wearing, as well as those that supported Joe Biden in the 2020 U.S. presidential election, were also more likely to have schools exclusively offering remote instruction. Conversely, districts located in counties with lower mask-wearing rates, as well as those that supported Donald Trump in the 2020 election, were also more likely to remain open. The shifts between modalities

^{*}This figure was calculated from the CDC's COVID-19 Diagnostic Laboratory Testing Time Series archived website (CDC, 2023d). During the week of September 14–20, 2020, a total of 42,803 COVID-19 tests were rendered in the state of Oklahoma, 9,845 of which yielded positive results.

often led to more work for teachers as they were again changing instructional approaches at a moment's notice (Pressley, 2021b; Pressley, Kidd, & Wheatley, 2023). See Table 1.1 for the percent of districts that offered fully remote, hybrid, and fully in-person learning at four time points during the 2020–2021 school year.

The Logistics of Teaching during the Pandemic

As for the teachers, this time period was challenging regardless of their school's reopening modality. Teachers who taught in schools that were fully remote during this period of time had to continue to translate their lesson plans and curricula to an online context (Huck & Zhang, 2021). Although most remote instruction was synchronous at this point, meaning that instruction was online but taking place in real time (Miller, Sellnow, & Strawser, 2021), teachers often delivered lessons to students with their cameras turned off, with little student engagement (Love & Marshall, 2022). In short, teaching remotely in the fall of 2020 was not an easy task.

Teachers delivering instruction in schools—whether fully in person or hybrid—also experienced challenges. As part of a continued effort to curb the spread of COVID-19, schools instituted a range of mitigation strategies. These included social distancing measures, serving lunch in classrooms, and masking mandates (Falk et al., 2021; Love & Marshall, 2022). In some cases, plexiglass was installed at the front of classrooms, and teachers stood behind it when they taught. Evidence suggests that this was not a particularly successful approach to mitigate the spread of the virus, especially given the length of time individuals spend in a classroom together (Eykelbosh, 2021).

A study conducted by Emily Oster and her colleagues (Oster, Jack, Halloran, Schoof, & McLeod, 2021) explored the efficacy of mitigation efforts in three states: Florida (n=1,453,464), Massachusetts (n=485,790), and New York (n=1,223,327). They focused on masking requirements, ventilation improvements, and student population density in schools. Most schools around the United States required masks for students and staff alike (Marshall & Bradley-Dorsey, 2020). Because of this, studying the efficacy of masking in most contexts was difficult given the lack of a control group. Florida represents an exception to this. Oster and her colleagues found that mask requirements (whether for staff, students,

TABLE 1.1. Distribution of School Districts by Learning Modality in 2020–2021

	5	Fu	Fully remote (%)	ote (%)				Hybrid (%)	1 (%)			Fully in-p	Fully in-person (%)	
	Q	9/5 1	11/2	3/1	2/9		9/2	11/2	3/1	2/9	9/2	11/2	3/1	2/9
All districts	2	25	19	8	-		41	45	52	45	34	36	39	54
High achievement		18	14	4	0		46	49	26	43	36	37	41	57
Low achievement		30	24	13	61		37	40	49	46	32	35	38	52
High broadband		33	56	12	П		42	48	59	51	25	27	30	48
Low broadband			12	4	П		44	41	45	37	40	48	51	62
High poverty		27	50	10	67		37	41	49	44	36	39	41	55
Low poverty		23	18	1-	7		46	48	26	46	32	34	37	54
High minority			28	14	9		38	42	55	50	26	29	31	49
Low minority		6	<u>~</u>	14	64	/	46	48	49	38	45	45	20	61
Large districts (12+ schools)			35	18	67	(34	43	58	26	18	22	25	43
Medium districts (6–11 schools)			28	13	П	(40	47	58	52	22	25	29	47
Small districts (3–5 schools)		15	12	70	П	O	42	43	48	39	43	45	47	09
Rural			11	4	П)	42	42	46	37	45	47	51	62
Suburban		38	28	12	63		45	52	99	56	18	20	22	43
Urban	-		39	21	63		33	40	54	55	17	21	25	43
Top third of COVID cases		12	13	10	0		43	40	59	46	45	45	31	54
Middle third of COVID-19 cases			16	6	П		37	46	51	43	37	25	40	26
Bottom third of COVID-19 cases		27	29	9	П		43	47	46	45	31	22	48	53
High mask wearing		40	59	10	67		40	49	62	55	20	22	24	43
Low mask wearing		6	~	7	0		42	40	41	33	48	52	22	29
Biden districts		47 (36	18	63		41	49	64	69	12	15	18	38
Trump districts		12	6	63	0		42	42	46	36	46	49	25	64

Note. Biden districts/Trump districts reflect municipality vote in 2020 presidential election. Data from Malkus et al. (2022).

or both) had no statistically significant impact on student and staff case rates in Florida schools. Given that Florida is one of the few settings in which a comparison could be made, it is worth noting that these findings may or may not generalize to other settings in the United States. Regardless of their efficacy, teachers had to contend with enforcing masking policies on top of their assigned duties—an especially difficult task with younger learners.

Similarly, they found that ventilation improvements were not associated with case rates. This could be explained by the range of ventilation improvements from one context to another. It is possible that some efforts were more robust than others and possibly did make a difference in the COVID-19 spread; however, this was not found in this particular study. Surprisingly, they found that schools with greater student density were significantly associated with *lower* rates of COVID-19. One might have hypothesized the opposite to be true. One possible explanation for this is that the study only accounted for what happens in schools, and outof-school activities may have been different for students in low-density (often, more rural) schools than for those in high-density schools. It is also possible that social distancing measures that were put in place were ineffective at reducing the spread.

Teachers who were in schools in person had to do more than simply manage COVID-19 mitigation efforts. As we noted, every family had the option of electing remote instruction for their children. Schools that were open for in-person learning had to find ways to educate remote students as well. In most settings, this manifested in one of three ways. Perhaps the most common solution was having teachers deliver instruction in a hyflex modality, simultaneously teaching students in person and those who were joining virtually. Just as most teachers were not trained for the remote instruction they were forced to deliver in March 2020 (Marshall, Shannon, & Love, 2022; Thompson, Darwich, & Bartlett, 2020), teachers who had to meet the needs of in-person and virtual students at the same time were not trained for this mode of instruction, either. Bartlett's (2022) review of modified learning modalities employed during the pandemic found that teaching hyflex was especially difficult for teachers. Other models included schools with teachers responsible for both in-person students and remote students, albeit not simultaneously (Marshall, Love, Shannon, & Neugebauer, 2023). In these schools, teachers had a roster of virtual students they were responsible for; however, in most of these instances, the remote students were learning asynchronously. Some

schools had dedicated teachers to teach virtual students, freeing those serving students in classrooms to solely focus on educating them. Overall, the teachers who taught in person during the 2020–2021 school year, whether it was their choice or not, had to overcome many challenges that frankly they were not prepared for and that often led to a lot more work and stress.

"A Return to Normalcy"

During the 1920 U.S. presidential election campaign, Warren Harding's campaign called for "a return to normalcy" (Gerstle, Rosenberg, & Rosenberg, 1999). World War I had just concluded a couple of years prior, the United States was in the midst of an economic downturn, and the 1918–1920 flu pandemic had wreaked havoc across the United States and the world. A century later, the phrase would be widely used again this time referencing a recovery from COVID-19. The 2021-2022 school year was billed as a return to normaley, with most of the more stringent mitigation measures retired. The lone exception was masking. The CDC (2022) issued guidance suggesting that masks be required indoors in schools. Just over 60% of schools began 2021–2022 with mask mandates, which held steady until about mid-February 2022. The emergence of the omicron variant in late 2021 and its subvariants in 2022 led to increased COVID-19 infection rates (Wang et al., 2022). The omicron variant also rendered vaccination less efficacious; many of those who were vaccinated contracted and spread the virus, which was not the case with previous variants. The good news was that, although more contagious and less shielded by vaccines, omicron was also less deadly, leading to fewer serious cases requiring hospitalization. The omicron variant is noteworthy because it marked the first variant of COVID-19 that did not overly disrupt schools. With the exception of a handful of isolated examples, such as the COVID-19-related teacher strike in Chicago Public Schools in early 2022 (Peréz & Kapos, 2022), schools did not close, and additional mitigation measures were not employed despite the spike in cases that came with omicron. By early March 2022, fewer than 10% of schools continued to require indoor masking. Teachers, however, reported that the 2021–2022 school year was the most difficult year they experienced during the pandemic, a point that we discuss in further detail in Chapters 4 and 5. As of this writing (May 2023), COVID-19 mitigation efforts have long concluded in every realm of American life, save for masking in doctors' offices in a handful of states and a few professional academic organizations that continued to require vaccination, including boosters, for conference attendees in the spring of 2023. Although the crisis itself may appear to be over and COVID-19 has become endemic, the aftermath of what took place during the intervening years will continue to affect K-12 education for some time to come.

A Pair of Lessons Learned

This book explores two overarching lessons learned from the pandemic: the impact of the policy failure of prolonged school closures on students and the impact that COVID-19-related policy had on teachers since March 2020. This is not a simple narrative, and the two threads are at times in tension with one another. However, we believe it is important to understand both of these for schools to move forward in the most productive manner. There are those who might claim that prolonged school closures were wrongheaded and that teachers were to blame. There are others who might claim that school closures were prudent and that teachers have had a tough go of it since March 2020. We believe two things can be true simultaneously—prolonged school closures were ineffective, and the job of being a teacher has become unsustainably challenging since the start of the pandemic. Chapter 2 discusses the folly of prolonged school closures in greater detail.

In Chapters 3 and 4, we explore the impact of school closures on children academically, socially, and mentally. Given how few children were seriously affected by the virus (e.g., Lee, Hu, Chen, Huang, & Hsueh, 2020), children have disproportionately borne the brunt of policy decisions that kept schools closed for long durations. At the same time, the job of being a teacher, which was difficult prior to the pandemic, became increasingly challenging. Teaching became tremendously more difficult during the pandemic whether teachers were teaching online for extended periods—often using video conferencing software (e.g., Zoom) with their students' cameras turned off—or whether they were in person in schools, teaching the students in front of them and remote students simultaneously while managing virus mitigation measures. Chapters 5 and 6 discuss teacher well-being and teacher labor markets in the aftermath of the crisis. In Chapter 7, we explore the changes that occurred in schools during the crisis and focus on the changes that are likely to remain common practice beyond the pandemic. As David Tyack and Larry Cuban observed in their 1995 book *Tinkering toward Utopia*, schools have historically resisted change. Perhaps this moment is different. In Chapter 8, we focus on what teachers need to be successful moving forward. In each focus group we conducted in the fall of 2022, we asked teachers a simple question: What do you need to succeed in your job? Their answers are revealing and important for school leaders and policymakers to understand to keep talented teachers in the classroom. Finally, in Chapter 9 we focus on where schools go from here, as schools face the consequences of decisions made during the pandemic, We hope this last chapter challenges school leaders, policymakers, and researchers to understand the state of schools and reflect on the best approaches to supporting teachers and students moving forward.