

State University of New York at New Paltz

Honors Thesis

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***COVID-19: Changing the Future of Elementary Education***

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## Abstract

In this thesis, I will explore the new school system during the COVID-19 pandemic and how it will change education forever, even post-pandemic. As a graduating future teacher, I am extremely interested in learning more about what worked and what did not work during the COVID-19 pandemic, and from whose perspective. I will discuss the technological aspect, and also the financial and personal components. I will also talk about the distractions at home, the lack of accessibility for students of different economic status, and the added stress and work from the teacher's perspective. Choices made during this time have created such a stir amongst teachers, students, and parents everywhere on what would have been the proper way to handle the recent significant changes in society. I have explored a variety of sources and arguments that have been published on this particular topic. In order to further develop my paper, I have also interviewed teachers, students, and parents that experienced the different types of schooling during the pandemic, ranging from fully virtual, hybrid, and in-person. Looking into my future career, it is important to discuss what is to be expected of elementary education post-pandemic. Will we learn from any poor choices that were made at the height of this crisis? And how should we approach the situation, should something similar happen again in the years to come?

*Keywords:* Early Childhood Education, Elementary Education, COVID-19 pandemic, Virtual schooling

## CHAPTER 1

### INTRODUCTION

Near the end of January in the year 2020, the first COVID-19 case was reported in the United States, and everything changed. People were forced to work from home or stop working altogether. Suddenly, everybody had to wear masks when they left their house, and they had to take extra precautions when someone coughed or sneezed around them. *Zoom* became one of the most popular apps on the internet, and families spent the holidays together virtually. Older people had to be extra alert, as they were more likely to react to the virus negatively. Perhaps the group most affected by this global pandemic were the students around the world.

Schools of every level, from elementary to university, had to make the grueling decision of how to maintain their routine. Do they go completely online, and teach solely via websites like *Webex* or *Zoom*, that some students may not have easy access to? Do they hold hybrid classes, where they meet in-person for half the week and online for the remainder? Or do they continue schooling in-person as usual, while mandating masks and social distancing, risking the health of the students and their families? After much controversy and debate, every school made a different choice, and had to hope they made the right one. Some changed their structure throughout, allowing more in-person time when COVID-19 cases were extra low, or the opposite, moving online when cases were at an all-time high. Students in any grade were often unable to be a part of this decision-making process, and were forced to acclimate to whatever routine their school district had decided.

Mentally and academically, students of all ages suffered greatly during these last two years. This thesis focuses specifically on the effects of the pandemic on elementary-aged learners. It will explore the perspectives of parents, teachers, and students when the pandemic first began, as well as how they are recovering from the consequences two years in, at a time when the virus no longer seems to be affecting people as frequently or seriously. After the creation of vaccines and even booster shots, schools have officially reopened, and as of March in 2022, allow students and teachers to attend without wearing masks. Everybody involved in the elementary school system is now walking into school with a completely new mindset and varying feelings about the past two years. Political differences are becoming much more prevalent in the classroom community, and the state of a student's home life is interfering vastly with their academic performance.

## CHAPTER 2

### EXPERIENCE OF TEACHING AND LEARNING IN THE PANDEMIC

When the COVID-19 pandemic was first beginning, teachers, students, and parents globally were forced to acclimate to a new routine and learning environment. Now, a little over two years later, students and teachers are back in the physical classroom, and many teachers are struggling to catch students up on all they missed. Depending on their home life during their virtual learning experience, the range of academic ability in the classroom has drastically increased. If students had parents that were able to be home with them, assisting them with all their assignments and homework, it is clear in the classroom today, as they are performing at grade level. Some students, however, had to experience online schooling almost entirely independently, and that too shows in their performance in the classroom in 2022.

When student teaching in the months of March, April, and May, I had the opportunity to see first-hand the effects of remote teaching on a fourth-grade class in Amityville, New York on Long Island. After speaking with my cooperating teacher, other members of the school staff, and many of the students, it was clear that students were struggling both socially and academically in a way that my cooperating teacher, a teacher of 13 years, has never seen before. Halfway through fourth grade, to read "on-level" means to read at a level Q or R, on the Fountas and Pinnell reading chart. This system involves using short fiction and nonfiction stories on each level, where students must read aloud to the teacher around four times a school year and answer questions to assess their comprehension. If a student performs exceedingly well on one level, the

teacher gives them a book to read on the following level. When they reach one where the student's score shows that the story was slightly challenging to comprehend or read with fluency, the teacher may stop testing them, and assign them a reading level to choose their independent reading books. While students should be reading at a Q or an R level, there were a couple of students in my class who were only capable of reading at a D or E level, which is where most first graders are. These students were prime examples of students who had little support at home academically for the last two years, and it was evident that those years were a huge setback for them. "It's as if those two years online did not even happen for some kids", my cooperating teacher explained. He, like many other teachers, has expressed that this year has been incredibly overwhelming as they are trying to teach them the new subject matter in the fourth-grade curriculum, while simultaneously attempting to catch everyone up on the last two years of content.

In this particular fourth grade classroom, some students were also having extreme difficulty exhibiting healthy social skills. Three out of the 24 students would very rarely speak at all, and if they raised their hand, it was only to ask to use the bathroom. They refused to speak aloud in front of the class, so when they raised their hand, the classroom teacher or I would have to walk over to their desk so they could whisper their request instead. Many other students had the opposite problem, and would consistently speak over others and not respect some of their classmates' opinions. After having no experience in a classroom, I had assumed that these behaviors could simply be fourth graders being fourth graders. They are ultimately still quite young, and I thought it normal to have some more reserved children along with many outspoken kids. Multiple teachers in that fourth-grade hallway, however, informed me that post-pandemic, it is clear that the students have not been in a normal, respectful classroom environment among

the entire class. For one year, this particular school tried to create a hybrid learning environment, with some students online for half the week, and the other students in the physical classroom. They were only interacting in-person with ten students or less, and only for two days of the week. Students did not get to interact much with one another for two years, so it is natural that certain rules and behaviors are not super familiar to them yet. When they were physically in school previously, they were only in first grade, so much of what they learned socially has been forgotten or dismissed during their time at home.

Despite falling behind academically and socially at times, many students are experiencing a new appreciation for school. According to an article from Learning Sciences International, many teachers have reported a new excitement amongst their students and have agreed that including peer interaction in their lessons has proven to be highly effective in keeping students engaged (Toth, 2021). When speaking with some fourth-grade students individually, I noticed that almost all of them stayed after school at least once a week for a club or extracurricular activity. They love that they are in school again and can see their friends, and they are certainly making the most of it. This appreciation for their education and the classroom environment is likely because they have been lacking all of its benefits for the last two years.

I also had the opportunity to student teach in a kindergarten classroom and discuss these same ideas with my new cooperating teacher. She explained that this year, being back in the physical classroom was not easy in the beginning, as "90% of the students were not able to attend a preschool during the pandemic". Usually, in the years before the pandemic, around half of the students came into her class with some background in a school setting. They understand the idea of a routine, they might know how to hold a pencil, and they probably are familiar with the alphabet song. This year, however, unless their parents took time to practice these skills with

them, they walked in blind. Taking care of twenty new five-year olds and laying the foundation for all of their future schooling comes with an immense amount of pressure. Although she expressed having a slow and difficult start, I was able to see that halfway through the year, they were all mostly on the same level. Some excelled or struggled at certain subjects more than others, but all of them reached the requirements necessary to push them through to first grade and be in good standing. Kindergarten appears to be the one grade where students will not be left too far behind as a result of the pandemic. Being their very first year in elementary school, these children have the most time to learn and prepare for the following years, whereas the fourth graders were falling behind and were being pushed to a much harder curriculum in fifth grade, whether they were ready or not.

When speaking with my second cooperating teacher, she had a lot to say about her experience with the transition to online learning at the beginning of the pandemic. Many teachers in her district decided they were not equipped to teach online, and so teachers like her had to step up and do, at times, double the work. She was called and asked to co-teach one of the bilingual classes in her school with another colleague, along with her own class. This proved to be incredibly difficult as she is not bilingual. She has learned a little Spanish since working in this district where many families are of Hispanic descent, but to teach a class where students spoke little English was no easy task. The entire experience was "a learning process, where collaboration and support were needed, and luckily provided". Unfortunately, other teachers might not have had the same support system in these unprecedented times.

## CHAPTER 3

### CULTURE WARS

Throughout the entire pandemic, from start to finish, political differences seem to have taken a front seat in many discussions about elementary education. So many debates on, initially, whether schools should transition to online learning, and more recently, whether schools should keep or lift the mask mandate, have often transitioned into a conversation on cultural differences or political parties. It seems nearly impossible to please everybody on important decisions like these. As the *New York Times* article "Why Liberal Suburbs Face a New Round of School Mask Battles" discusses, "Some see masking as a potent health tool and a symbol of progressive values. Others have come to see face coverings as an unfortunate social barrier between their children and the world. And many people are somewhere in between" (Goldstein, 2022). The conversation on mask mandates often transitions to a conversation on vaccines. Should those who are vaccinated be able to choose whether or not they wear a mask? Or is that decision marginalizing students who have not gotten vaccinated due to a parent's cultural, or otherwise personal, decision? Should those who are vaccinated need to also have gotten a booster shot? Or is the initial vaccine enough?

As of March in 2022, the mask mandate for New York schools was lifted, and students were able to attend school in person without a mask for the first time in years. Prior to this major decision, however, many parents were not thrilled covering their children's faces all day. One survey done by the National Public Radio, or NPR, just two months before the lift, shared

several perspectives on the topic. Kerry Dingle, the parent of a three-year old with a speech delay attributes much of his language difficulty with wearing a mask all day. She explains that he is lacking the "visual input" that is necessary when children are learning to communicate. The American Speech-Language-Hearing Association has noticed that more students have been referred to speech therapy since the start of the pandemic, however it is not proven to be the fault of the mask mandate. Brittany Gonzalez, a special education teacher, offers a different reason for children not to wear masks. She is concerned for some of her students with autism who have gotten very used to the mask and almost use it as a "security blanket" in social situations. Another mother has the same concern for socialization for the simple fact that her children cannot see their friends smile or frown. She worries that they are "not developing empathy" (Kamenetz, 2022). Many saw very few benefits for children to continue wearing masks in school, in fact, they felt their children or students were suffering as a consequence.

Other parents and teachers are in favor of keeping the mask mandate in place as it is a safety measure. According to an article by the Pew Charitable Trusts written in April, parents of immunocompromised children worry that without masks, a new surge of the COVID-19 virus can put their kids at risk. Socially, they also fear that wearing a mask, their child might feel a sense of isolation amongst a classroom full of friends who are not wearing them. Besides students who are immunocompromised, there are also those who cannot get vaccinated or those who are simply high risk, who are now attending school with immense fear. Families should also be taken into consideration. As one student from Maryland explains, "[her] parents are in their 60s [and her] mother is a cancer survivor" (Wright, 2022). They cannot risk getting the virus, but she feels that her voice and voices like hers are not being heard at all amongst the majority of

anti-maskers around her. There seems to be no way in which both groups are satisfied with any decision on the mandate.

In one study, led by the Pew Research Center, parents of K-12 students were asked on three separate occasions about their concerns about their child's academics in order to assess their feelings on schools having in-person instruction (Horowitz, 2022). The first time they were questioned was in July of 2020, just a couple of months after the pandemic first began. They were asked the same questions the following year in February, and once more in January of 2022. The results show that in the first year, the prime concern of these parents was the risk of students or teachers getting and spreading the coronavirus. This concern lessened year after year, as it seems they begin to not be nearly as worried about the virus itself and its dangers. As the years went by, parents had a growing concern over the fact that their children might fall behind academically or that their emotional wellbeing will be negatively affected. Initially, many did not want their children going to school because being in such a small environment surrounded by classmates and teachers who come from different homes with other people, sounded extremely dangerous. There was a greater fear of catching the coronavirus. Now, parents are beginning to see the negative effects of online learning on their children's academic and emotional growth, however, and would rather risk getting sick than return to that style of learning. In comparison with the research done above, it is clear that the parents and teachers who are against the mask mandate might share the exact same concerns as the parents interviewed in this survey. Those in support seem to be taking the spot of minority group in this debate.

## CHAPTER 4

### ACADEMIC CONSEQUENCES

When the COVID-19 pandemic took over the country, schools had to make difficult decisions regarding the structure of their classes. Do they only hold virtual classes, risking the academic performance of many students? Or do they continue to have in-person classes, and risk their students catching the highly contagious virus, and spreading it to others? In an effort to prevent the spread of the virus for teachers and students, many opted to hold only online classes that students were expected to take from home. However, it has been noted that in the past year, more than 97% of educators have seen some kind of learning loss in their students. According to several studies, the degree of learning loss was not equal for every kind of student. For different groups of students from a variety of racial and economic backgrounds, the transition to virtual schooling was not an easy one, and their academic performance suffered greatly.

Virtual learning has not been beneficial for everyone by any means. Research has shown that "distance learning has caused a significant setback in achievement, particularly among Black and Hispanic students, as well as students with disabilities" (Dickler, 2021). School districts with more of a financial advantage are trying to help others that do not share the same resources. They are loaning laptops to students who do not have access to one and giving out Wi-Fi hotspots to help students get online. Some teachers have gone above and beyond, calling students individually to assist them with assignments. Others have even made visits to them in person to provide alternate materials, like textbooks and paper homework, when there is a lack of access to

technology. There is no perfect solution, however, so these are only circumstances for some incredibly lucky students. In the same kind of areas elsewhere, a student could be left helpless, without Internet access, and falling behind every day.

Across the United States, there exists a trend where students of color are more likely to attend schools with minimal resources and a more dangerous environment than their white peers. Many of these students also have working parents with packed schedules. When a student with fewer academic resources is forced to attend school from home with little adult presence, they are ultimately set up to not succeed. In general, a parent's role in their child's elementary education is incredibly important, especially in this remote learning period. Even before the pandemic, students of color have experienced less opportunities, so this virus has just created a larger achievement gap. COVID-19 has disproportionately affected many families of color these past years. According to one study, "black children accounted for 20% of those who had lost a parent to COVID-19 through early 2021, despite making up only 14% of all children in the United States" (Goldberg, 2021, 11). Suffering this extreme loss and grief certainly will not help with the academic performance of these children. It also prevents them from receiving the appropriate adult supervision or assistance with their assignments. Though there have been efforts by state districts to fund and help narrow the technology gap, there still exists a disproportionate amount of Black and Latinx students that do not have consistent computer access or Wi-Fi. As of October 2020, "almost one of every ten Black and Latinx households still lacked consistent computer access, compared to only 6.7% of white households. And while only 4.7% of white households reported inconsistent internet access, more than twice as many Black households and one-and-a-half times that many Latinx households said the same" (13). These

statistics show a clear inequality among different students, resulting in poorer academic performance by minority groups.

Another group that has been negatively affected by distance learning is English Language Learners in elementary schools. For young English learners, being fully immersed in a normal classroom is crucial. In order to master any language, being surrounded by people speaking that language is incredibly helpful. ELL children that enter a majority English-speaking classroom spend six hours a day, five days a week, listening to their teachers and peers speak mostly English. They are able to pick up on key phrases and eventually, by the end of the year, they have a much wider vocabulary than what they started with. With virtual learning, they do not have this same opportunity, and are still home with their native-language speaking family all day, every day. They engage in much less conversation with their classmates and instructors, and their academic performance suffers in return. There seems to be a lack of certified ESL teachers in many districts as well, so with the new online structure, it is more difficult for them to split their time between classes, and give students the opportunity to master the language, along with the general curriculum. With all of these disadvantages in mind, data has shown that there has been a sharp increase in failing grades given to English learners since the pandemic started affecting schools.

Perhaps the students who suffered the most during this virtual learning period, academically and developmentally, would be the elementary students with disabilities. Many schools shortened the school day during the pandemic, so there was often not appropriate time spent on providing specialized instruction or services illustrated in a student's IEP, also known as their Individualized Educational Plan. "And for students whose needs require hands-on, face-to-face interaction—like occupational or physical therapy—COVID-19, in some cases, brought

services to a stand-still" (Goldberg, 2021, 25). Based on the grades collected in the past year, the virtual learning environment has not benefited these students at all socially, academically, or developmentally.

Although there seems to be several groups of students clearly struggling with this new online learning structure, there is a small bunch of people that have actually improved academically with this change. According to Kasey Short, a middle school English and social studies teacher in North Carolina, some students are thriving as they have no more in-person distractions. Students do not have to worry about sports, clubs, or other extracurricular activities that might have filled their schedules before and caused some anxiety. Mrs. Short explains that "they have more time than they ever had to work on schoolwork" (Fleming, 2020). For middle school and high school students especially, there has been a quite different perspective, where many actually prefer this online learning environment.

The learning that children do in elementary school is probably the most important to do well in, as the information they are learning will help them for the rest of their lives. As of now, schools are back in person, but this status can change any day if the virus continues to rapidly spread. The transition to online learning has affected an entire generation of students, many in an extremely negative way. It pushes certain students back and creates an even bigger divide between minority students and students with disabilities with the rest of their peers. These statistics need to be taken into consideration if or when teachers move their classes online, or the children will continue to suffer.

## CHAPTER 5

### CONCLUDING REFLECTIONS

Since January of 2020, elementary education has changed drastically in response to the global COVID-19 pandemic, in an attempt to keep young students on track for success. After experimenting with virtual learning, or teaching a hybrid of online and in-person classes, teachers and students everywhere have experienced a general decrease in motivation, and in many cases, performance as well. As the title of this thesis suggests, the changes experienced during the last two and a half years will likely affect education as a whole for years to come. The future of elementary education has been changed for better or worse.

According to the National Education Association, or the NEA, there is expected to be more collaboration between teachers and their district. Teachers have had to communicate with their superintendents and districts about everything throughout the pandemic. This increase in conversation has created a strong trust between the two groups as professionals. Teachers were trusted to teach from their homes, separate from the school entirely. Some guidelines were even changed when they saw teachers being overworked. For example, the San Juan Teachers Association in California "worked with the district administrators to draft guidelines for teaching 'essential standards,' rather than mastery of all the standards- recognizing the unprecedented situation" (NEA Today, 2021). Learning standards are concise descriptions of what students are expected to know and do in each grade, so this alteration relieves some of the pressure that many

teachers were experiencing, where they had to achieve the same results in their students under extremely different conditions.

In future years, there is also expected to be movement towards a more equitable education. During the pandemic, teachers have been able to see very clearly that certain students of minority groups are at an extreme disadvantage when it comes to learning. The NEA suspects that this is going to encourage teachers to create more accessible lessons and build stronger relationships with the families of their students. With many families experiencing a lack of internet access and other necessary technological resources, as well as in many cases, job loss, students were forced to miss weeks of virtual schooling. Not knowing about the home lives of each of their students, the NEA President Becky Pringle explains that we must "ensure every student and every educator can learn and work in spaces that are safe, supportive, enriching, and equitable" (NEA Today, 2021). The data that expresses the overwhelming academic loss experienced by students of color or students with disabilities should push educators and communities as a whole to advocate for these students, and provide them with the extra resources and support they need to stay on track with their peers.

In order to maximize a child's success in such new and uncertain environments and circumstances, teachers and parents really had to work together throughout the pandemic. In the past couple of years, they have seen the incredible benefits of forming this close relationship and will continue to prioritize this relationship in the future. They have also seen the extreme consequences of not having a parent invested in their child's education. Many studies have shown that "children whose parents are more involved in their education have higher levels of academic performance than children whose parents are involved to a lesser degree" (Topor, 2010). This has only proven to be more extreme in the past years of the pandemic. Since teachers

were unable to provide the same attention and extra help online to certain students who would have benefitted from that in a general classroom setting, parents were expected to step in at home. Some accepted that role, while others did not, and teachers took note of how these parents directly affected their child's education. In future years, teachers will learn from this and focus on creating a healthy teacher-parent relationship in order to optimize their students' success.

One of the most obvious changes to future elementary education in response to the COVID-19 pandemic is the greater use of technology within the classroom. Teachers, students, and parents were exposed to new resources, programs, and websites that can provide extra support to students who may need it now post-pandemic. Utilizing programs like Zoom, Webex, or Google Meet for convenient meetings between teachers, or with parents and administrators is becoming increasingly popular as well. Teachers during the virtual learning period have grown accustomed to recording their class sessions or lectures for those that were absent or simply for students to keep and review. This has inspired many to continue with this trend or provide similar extra help in their in-person classes as well. One art teacher in Massachusetts, Christine Doherty, has taken time to create instructional YouTube videos that the students can refer to from their homes for extra help and a demonstration they can pause and replay when needed (NEA Today, 2021). Teachers have also been introduced to sites and programs that can create more engaging lessons as well, or provide more chances for students to collaborate with one another online. The available uses for technology inside and outside the classroom are only growing as the pandemic continues.

The National Education Association predicts that post-pandemic, there will be a growing focus on teachers' and students' mental health. These two groups, as well as many others, struggled mentally over the last two years. The anxiety of students who are not fully aware of

what is going on globally, as well as the anxiety of teachers never knowing if they are doing enough, or what is expected of them, is an overwhelming feeling, especially during the initial year when the virus was first discovered. The CDC (Centers for Disease Control) Foundation led several studies involving mental health findings amongst parents and teachers, comparing responses from before the pandemic to May of 2021 in the midst of the madness. After more than 56 million parents responded to a survey, results showed that in 2018, 13% of parents experienced "frequent mental health distress (14 or more days of poor mental health in the past month)" (CDC Foundation, 2021, 10). In May of 2021, however, there was a slight increase to 16% of parents that experience frequent mental health distress. Parents of elementary students are overwhelmed and burnt out, as they have had to take on extra responsibility. In their study on the mental health of teachers, surveys have found that since the start of the pandemic, more teachers have reported experiencing anxiety and depression, and more than half, of the almost 2,000 teachers surveyed, said "they were considering leaving the field or retiring more now than they were before the pandemic". Teachers, the people so many children are counting on and looking to for motivation, are losing their very own. They have been expected to acclimate to new routines with incredibly short notice, and have had to physically and figuratively, take their job home with them. Another study, completed by EdWeek Research Center in 2021, collected data from teachers and students halfway through the school year when school was held completely online (Toth, 2021). Students were asked to consider if they felt more or less motivated in school than in past years, or if they felt there was no change. Then, teachers were asked their opinions on the students' motivation as well. While 50% of the students reported feeling less motivated, teachers felt that a more realistic percentage of less motivated students was 87%. The morale of the students and their eagerness to learn was not nearly the same in a

virtual setting as it has been in the past. Based on the combined research, both students and teachers have become extremely unmotivated during the pandemic, which does not help any student reach their full potential. These mental health issues have not gone unnoticed by administration, and it is predicted to be a much larger focus as the years continue.

Finally, there are going to be extra health and safety measures put in place in schools everywhere. Nurses have been essential during the pandemic. Beyond cuts and bruises, they have had to screen students for COVID-19 every day and make important decisions on whether certain students should be sent home. Masks, hand sanitizer, excessive washing of hands, have all become such a habit now in the classroom, that schools and teachers will place a greater emphasis on the importance of being safe and staying healthy. According to the U.S. Government Accountability Office, "in order to prevent the spread of the corona virus inside schools, more than 41 percent of school districts need to update or replace their heating, ventilation, and air conditioning systems in at least half of their buildings" (U.S. GAO, 2020). The changes made during this time will continue to benefit the overall safety and health of elementary students for the years to follow.

When everything changed in January of 2021, nobody knew what the following two years would bring regarding education, especially the children. Students of all ages struggled to keep their grades up in a completely new school environment and teachers of all grades were forced to change the way they teach entirely, in just a moment's notice. One thing that was true throughout the pandemic is that nobody was experiencing these changes alone. Although it has not been easy, we have learned so much about our education system and changes that should be made, and perhaps should have been made a long time ago, during this pandemic. In the

upcoming years, it is important to make these changes and improve elementary education everywhere, so that every student can succeed in the best conditions.

## REFERENCES

- Bassok, D., Bauer, L., Cellini, S. R., Hadani, H. S., Hansen, M., Harris, D. N., Olsen, B., Reeves, R. V., Valant, J., & Wong, K. K. (2021, March 12). *Coronavirus and schools: Reflections on education one year into the pandemic*. Brookings. Retrieved from <https://www.brookings.edu/blog/brown-center-chalkboard/2021/03/12/coronavirus-and-schools-reflections-on-education-one-year-into-the-pandemic/>
- Callimachi, R., & Kalifa, T. (2021, May 5). *'I used to like school': An 11-year-old's struggle with pandemic learning*. The New York Times. Retrieved from <https://www.nytimes.com/2021/05/05/us/remote-learning-education-pandemic.html>
- CDC Foundation. (2021, May). *Mental Health Impact of the COVID-19 Pandemic on Teachers and Parents of K-12 students*. CDC Foundation. (pp. 1–24).
- Dickler, Jessica. (2021, October 12). *Virtual School resulted in 'significant' academic learning loss, study finds*. CNBC. Retrieved from <https://www.cnbc.com/2021/03/30/learning-loss-from-virtual-school-due-to-covid-is-significant-.html>
- Dominus, S. (2021, May 13). *'I feel like I'm just drowning': Sophomore year in a pandemic*. The New York Times. Retrieved from <https://www.nytimes.com/2021/05/13/magazine/high-school-students-coronavirus-pandemic.html>
- Fleming, N. (2020, April 25). *Why are some kids thriving during remote learning?* Edutopia. Retrieved from <https://www.edutopia.org/article/why-are-some-kids-thriving-during-remote-learning>
- Goldberg, Suzanne. (2021, June 9). *Education in a Pandemic: The Disparate Impacts of COVID-19 on America's students*. Office for Civil Rights, Department of Education. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf>
- Goldstein, D. (2022, February 10). *Why liberal suburbs face a new round of School Mask Battles*. The New York Times. Retrieved from <https://www.nytimes.com/2022/02/10/us/school-mask-mandates.html>
- Horowitz, J. M. (2022, February 26). *Academic, emotional concerns outweigh COVID-19 risks in parents' views about keeping schools open*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2022/02/04/academic-emotional-concerns-outweigh-covid-19-risks-in-parents-views-about-keeping-schools-open/>
- Kamenetz, A. (2022, January 31). *Debate rages over whether kids should wear masks at school*. NPR. Retrieved from <https://www.npr.org/2022/01/31/1077064895/debate-rages-over-whether-kids-should-wear-masks-at-school>

- Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Lewis, K. (2022, March 3). *How is covid-19 affecting student learning?* Brookings. Retrieved from <https://www.brookings.edu/blog/brown-center-chalkboard/2020/12/03/how-is-covid-19-affecting-student-learning/>
- Li, Cathy H. (2020, April 29). *The COVID-19 pandemic has changed education forever. This is how.* World Economic Forum. Retrieved from <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>
- NEA Today. (2021, April 15). *How the pandemic will change the future of Schools.* NEA. Retrieved from <https://www.nea.org/advocating-for-change/new-from-nea/how-pandemic-will-change-future-schools>
- Smelkinson, Margery. (2022, January 26). *The case against masks at school.* The Atlantic. Retrieved from <https://www.theatlantic.com/ideas/archive/2022/01/kids-masks-schools-weak-science/621133/>
- Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). *Parent involvement and student academic performance: A multiple mediational analysis.* Journal of prevention & intervention in the community. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3020099/>
- Toth, Michael D. (2021, March 17). *Why student engagement is important in a post-COVID world.* Learning Sciences International. Retrieved from <https://www.learningsciences.com/blog/why-is-student-engagement-important/>
- U.S. Government Accountability Office. (2020, August 11). *K-12 education: School districts frequently identified multiple building systems needing updates or replacement.* K-12 Education: School Districts Frequently Identified Multiple Building Systems Needing Updates or Replacement | U.S. GAO. Retrieved from <https://www.gao.gov/products/gao-20-494>
- Wright, Aallyah, (2022, April 19). *Parents say mask-optional policies leave out high-risk students.* The Pew Charitable Trusts. Retrieved from <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2022/04/19/parents-say-mask-optional-policies-leave-out-high-risk-students>