Disparities in Education Highlighted by the COVID-19 Pandemic
A Research Paper

Pioneer Open Summer Study

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I.   Abstract

As the COVID-19 pandemic spread in early 2020, countries implemented a social distancing policy in an attempt to lower the transmission rates of the virus. This meant that schools worldwide were forced to close in the middle of the school year. Rather than learn in-person, most schools adopted a remote learning model, where students learned from home through the use of technology and the internet. This abrupt transition that education systems were not prepared for resulted in a gap between the quality of education students received. Recent data shows that these school closures impact students and families from low-income backgrounds the most. In this study, we researched the effect of school closures on students, teachers, and parents focusing on the stress and how the pandemic emphasized the disparities based on income in our education systems. Furthermore, we researched reopening plans and the central role school plays in society, focusing on lessons learned from reopening in other countries and the policies they were implementing. We assess how these proposed policies could strengthen our education systems to provide an equitable education for all students, regardless of their financial backgrounds.

II.   Introduction

       The COVID-19 pandemic spread rapidly across the world in early 2020. Governments and other organizations scrambled frantically to find ways to treat the disease and limit the spread. Travel restrictions, quarantine periods, and disease tracing were implemented to attempt to contain the disease before it spread worldwide. Their efforts were not successful and by March 2020 most of the world shut down, people were told to stay home as limited contact with others could help mitigate the spread of disease. COVID-19 has uprooted all aspects of life, but its effects can be seen very clearly in the education system. In March, schools across the globe were
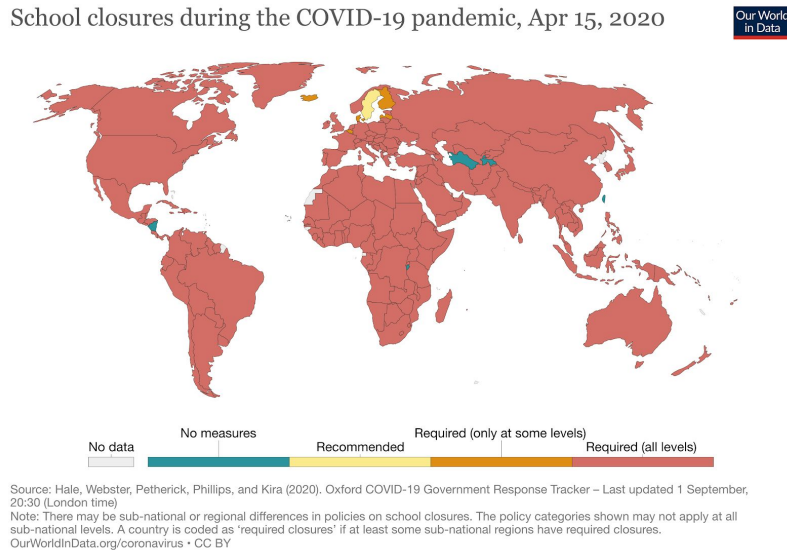

Figure 1, Source: Our World in Data

closed to comply with stay at home mandates. By April 15, almost every country in the world required schools to be closed, as shown in the figure above. Rather than attend school in person, most students transitioned to some type of online and remote learning, which was made possible by recent advances in technology and internet access but that is not exactly uniform all around the world. In the middle of the school year, students, teachers, parents, and faculty had to redefine traditional schooling.

       Every day over one billion children go to school, according to UNICEF. Even before the pandemic there was already a visible divide in the education these students received depending on their financial background. UNICEF reported that schooling does not always correlate to effective learning, and a significant number of children do not receive schooling in the first place, "Schooling does not always lead to learning. Worldwide there are more non-learners in school than out of school. What's more, roughly one in five school-aged children are not in school at all. Children and adolescents are excluded from education for many reasons. Poverty remains one of the most obstinate barriers, with children from the poorest households almost five

times more likely to be out of primary school than the richest." The rapid transition to online education as a result of the pandemic exacerbated these already existing problems and made them worse. The pandemic's effect on education systems worldwide emphasizes the disparities in the education students receive based on their socioeconomic statuses and highlights a need to make education more equitable.

III.   Students

Due to the COVID-19 pandemic, education systems throughout the world have had to close school buildings and make the transition to virtual learning. Students, as well as their teachers and other school administrators, have continued to complete work from home through technological platforms, such as Zoom and Google Classroom. However, this abrupt yet necessary transition to online learning has not been the same for all students and school districts. In fact, this new reliance on technology has revealed the socioeconomic divisions between students of all ages. Many students have been unable to access remote learning because of their lack of resources. For example, many low-income students do not have devices, such as computers or laptops, required for online learning. Many also lack stable internet connections, putting them at an unfair disadvantage to students who do have such access. A study, conducted in the United States, found that "only a fifth [of schools] have required live teaching over video, and that wealthy school districts were twice as likely to provide such teaching as low-income districts." This 'relaxed' approach to teaching and learning is often the only option schools from low-income districts have because their students simply do not have the means to participate in the transition.

Another issue schools are facing with students in this shift to online learning is chronic absenteeism. Teachers have reported that more than half of students have been failing to show up to class or are not actively participating. However, such rates of absenteeism are more likely to be seen in low-income districts where students simply cannot log into online classes due to technology or internet-related issues. These problems inflicted by class divisions have caused low-income students to fall behind their peers from higher-income communities.

Because of these socioeconomic differences, students from low-income communities have been making less progress compared to their wealthier peers. In these past few months, when the education of low-income students has not been meeting the same standards as those of high-income students, students from low-income families have been shown to be falling behind in several subject areas. For example, according to a study done in the United States, "through late April, student progress in math decreased by about half in classrooms located in low-income ZIP codes, by a third in classrooms in middle-income ZIP codes and not at all in classrooms in high-income ZIP codes." These numbers support the claim that because of the lack of resources, poorer students are being put at a disadvantage to wealthier students, and not much has been done to address this problem. Because of the economic crises occurring throughout the world,

such as unemployment, not many funds have been allocated to support schools that may need support in order to give their students the tools they need to have a good education during the COVID-19 pandemic. In all these ways, the shift to online learning has emphasized the economic disparities between students and how it has negatively affected their learning.

IV.   Teachers

For years people have been saying teachers are underpaid, and that this is why teacher burnout was so prevalent. They have a point. The average teacher starting salary in the US is just $39,249, compared to the average US salary of $50,000. Teachers are well educated, and when compared to other professionals with the same education and experience teachers are required to have, we find that teachers are paid 21.4% less than professionals with comparable education and experience. Making matters worse, teacher salaries are actually decreasing. According to the National Teacher Association, the average teacher salary has dropped by 4.5%. Besides being underpaid, teachers are often overworked. *Teacher self-efficacy and teacher burnout: A study of relation,* found that because teachers have hectic school days with a heavy workload they are often required to work on weeknights and weekends to prepare. This means they have little time for rest and causes emotional exhaustion which is a central element to teacher burnout. These conditions are leading to a national teacher shortage, with just 59% of teachers continuing after their first four years. Teachers are hardworking and passionate with a very important job (this pandemic has really shown how essential schools are to the economy) but are overworked, underappreciated, and underpaid. The pandemic has exacerbated this. COVID-19 caused teachers to take on a greater role in their student's education, adding to the stress they already face in this pandemic.

This pandemic has piled more work on teacher's plates. They are responsible for their student's education and without seeing them in person ensuring that they learn effectively has proven to be a difficult task. One of the biggest responsibilities teachers worldwide have had to take on is learning how to teach online, adapting their curriculums so students could follow along and learn without having the same resources they have in a classroom, such as maps or charts. According to *COVID 19 – Lockdown: Technology Adaption, Teaching, Learning, Students Engagement, and Faculty Experience* despite the training some teachers received to help them transition most faculties felt hesitant and resisted the change to online learning. A study run by the Asian Journal of Distance Learning, *A global outlook to the interruption of education due to COVID-19 Pandemic: Navigating in a time of uncertainty and crisis*, found that technology changes the way teachers teach. Teachers need time to get regular exposure to online learning so they can understand its attributes and can blend it into their regular teaching, a model that has proven its worth. But before then, teachers have to learn to integrate technology into their classrooms. This has not been an easy task. According to *Education, inequality, and innovation*

in the time of COVID-19, most teachers had no previous experience with online learning, meaning they had to rapidly adapt once schools rapidly closed in March.

On top of having to suddenly modify their curriculums, teachers undertook a second responsibility: reaching all of their students. This pandemic has shed a light on how socioeconomic differences affect the education children receive. A student's financial background affected and was correlated with whether or not they had reliable or any internet access, a device on which they could access online classes, a suitable quiet place to study, someone to look after them and ensure their safety while they were in class, or if they even had proper nutrition. When students are physically in school, all students can listen and ask questions to their teachers, have a quiet place to study, and be properly looked after. But this was not the case with online learning.

The United Nations Children's Fund (UNICEF) reports that at least ⅓ of school-age students are unable to access remote learning during school closures and experts fear this number may actually be much higher. This made it harder for teachers to ensure their students actually learned or at least did not fall behind or lose the intellectual gains they had had before March. In Los Angeles, the United States' second-largest school district, about 13% of students had no contact with their teachers and ⅓ were not regularly participating in online learning. In Cleveland, teachers tried to hold virtual parent-teacher conferences, where a parent sits down with a teacher to discuss their student's progress but were only able to reach about 60% of families of the district's 38,000 students, eventually, through teacher's efforts they managed to reach 87% of families, but they were not able to reach the other 13%. This is particularly concerning because Cleveland has one of the highest child poverty rates in the US, the district superintendent, Eric Gordon, estimated that about 30% to 40% of students do not have reliable internet access. This is also the case in other countries. Mexico, for example, has reported that only about 56% of households have internet access. This is certainly a problem when teachers are planning on teaching their students through online learning, which not only requires an internet connection but also a technological device.

Teachers struggled to adapt their curriculums so that all of their students would learn. They have done this in many ways. In Cleveland, teachers are mailing out printed work packets to students, including free meals and other necessities. In Mexico, the education department has decided to air school on television, because they presume it will be more effective at reaching students as over 90% of the country has a television. Teachers are filing lessons which will play on public channels throughout the day for students to watch, these lessons will also air through radio waves to reach students in more remote areas that may not have WiFi access. Despite the hardships, teachers are still coming up with innovative, creative, and hopefully effective ways to teach their students.

On top of the extra worries and responsibilities teachers have undertaken in this crisis, they, like everyone else, are worried about COVID-19. The US Department of Education has

reported that at least 30% of teachers are 50 and older which places them at a higher risk of getting gravely ill from COVID-19. *Philippine Teachers' Practices to Deal with Anxiety amid COVID-19,* a study on teachers' worries, found that 92.7% of teachers are not comfortable in crowded places as they are fearful of contracting COVID-19. Another 92.7% reported that they were particularly worried about their family members getting infected with COVID-19. They expressed fears about returning to work and bringing the virus home with them. Teachers have been expressing their fears around COVID-19 by signing petitions online to keep schools closed. Petitions of this type have been created in many countries and regions, and teachers and faculty show overwhelming support for keeping schools closed. NPR reports that 82% of US teachers are concerned about returning to in-person teaching and ⅔ of them would prefer to continue teaching remotely. 77% of teachers reported they were worried about their own health, and 78% were concerned about schools not having enough personal protective equipment of sufficient cleaning materials and capacity to ensure in-person teaching was safe.

These findings show how COVID-19 has hit teachers with extra responsibilities and added worries. With teachers already being overworked and stressed, these added worries have affected them deeply. When we consider reopening, we should keep teachers' concerns in mind as their input can help us create an educational environment that is not only safe but also provides an equitable education to everyone, which may even combine the qualities on online learning that proved effective to traditional schooling.

V.   Parents

The quarantine and lockdown mandates imposed on people around the globe caused much anxiety for all people. When the number of cases began to rise all over the world, parents began to worry about how they would care for their families. Many factors, such as education, work, health, and safety, were now in question as people were mandated to stay home to slow the spread of the virus. Parents had to change their lifestyles to accommodate the health precautions that they needed to take to stay healthy and safe.

Some parents had to file unemployment claims or paid family leave to say safe during the quarantine period of the pandemic. In most cases, parents can file for these claims if they have children working remotely from home, if they are caring for family members affected by the coronavirus, if they are "gig-workers," if they had to quit their jobs because of the coronavirus, and/or if they are self-employed. For parents that are first responders, staying safe while at work and home is most important as well as challenging. Strict protocols must be followed to make sure that first responders are not spreading the virus to others. For example, EMS employers must take training in how to prevent the spread when working with patients that may carry the coronavirus, employers must use appropriate PPE equipment to reduce the spread, and vehicles that carry patients need to be disinfected and equipped with the proper supplies. When returning

home from work, parents should be cautious in restricting the spread of the virus to their families by taking necessary precautions at home.

If children or other family members became sick with the coronavirus, parents had to worry about how to keep their children healthy and safe. If parents see coronavirus symptoms in their children, they should contact a healthcare professional. In most mild cases, the coronavirus could be treated at home under healthy conditions after seeing a doctor. If a child in the family becomes sick with the virus, various recommendations should be taken for account. Other family members and pets should be kept away from the sick family member, all family members should remain home in quarantine together until the person is recovered, parents should try to have one caretaker for the sick child so that the spread would reduce in the family, and the house should be clean and safe for all members of the family.

In light of these events, parents needed to help children keep up with their schoolwork while working from home virtually. To reduce stress while managing both responsibilities, it is recommended to keep a flexible schedule and a reasonable daily routine, such as learning virtually at the same time every day, keeping a healthy sleep schedule, and making time for relaxation. To adjust for these conditions, making learning more flexible for children will ease the anxiety as well. More specifically, for parents with children that have special needs, implementing substantial need-based services at home will help them thrive in their environment. Tele-health therapies with physical therapists and occupational therapists will help children keep regulated while staying home.

VI.   Reopening

Almost immediately after schools closed in March, school, government, and health officials began asking how and when in-person learning could safely resume. Now, almost six months later, learning institutions all over the world are either beginning or preparing to open for in-person classes to begin the new school year. The reopening of schools is shrouded in uncertainty, there is no precedent for doing so. Educators, parents, and students alike are, understandably so, concerned about what lies ahead.

Despite the number of COVID-19 cases spiking in various parts of the United States, the Centers for Disease Control and Prevention (CDC) is actually encouraging schools to reopen, citing the detrimental effects extended breaks from learning can have on students and studies that have indicated that the transmission and death rates of the virus are far lower among school-age children than it is among older individuals. "The best available evidence indicates if children become infected, they are far less likely to suffer severe symptoms. Death rates among school-aged children are much lower than among adults. At the same time, the harms attributed to closed schools on the social, emotional, and behavioral health, economic well-being, and academic achievement of children, in both the short- and long-term, are well-known and

significant. Further, the lack of in-person educational options disproportionately harms low-income and minority children and those living with disabilities."

The CDC, as well as parents and educators, fear that not returning to in-person classes as soon as possible will result in severe learning loss among students. This is no new concept, it is well documented that summer vacation, an extended break from learning, results in "summer slide," the loss of retained information taught during the school year. Studies have shown that by the summer after seventh-grade students lose almost half of their school-year gains. The same studies also indicate that the older the student is, the greater the impact of "summer slide" is. Experts fear that if students do not return to school soon, the effects of at-home learning will be more severe than we could ever imagine because of the long break from the classroom than students have ever experienced.

Schooling does far more for a child than nurture them academically, it is also a key factor in their social development. The school environment allows students to harness and improve their social skills and relationships with their peers. The longer schools remain closed to in-person classes, the more social opportunities students miss out on. The closures are also taking severe tolls on the mental health and overall well being of students. School provides an environment that is safe and nurturing for children. Without such environments, students are more prone to depression, decreased activeness, and, in some cases, thoughts of suicide and the tendency to take part in substance abuse. Studies are also showing that school-age children are beginning to show symptoms of Post Traumatic Stress Disorder (PTSD) as a result of the quarantine. School also provides students with methods of physical activity such as gym class and organized sports; without such activities, students likely will not have access to adequate physical activity, resulting in a decline of physical health.

The CDC has concluded that the negative effects of at-home learning, the toll it takes on the mental, physical, and emotional health of students, and the possibility of detrimental effects on students' learning gains greatly outweighs the relatively low chance of children contracting and spreading the virus as they return to school. With proper safety and sanitary precautions put in place as well as the practice of good hygiene and daily cleaning, schools should see fairly low infection rates.

Now that the CDC has made its ruling regarding the reopening of schools, school and state officials are left with the task of deciding how to reopen in a way that is safe and effective for children and faculty alike. So far, we have seen four strategies for reopening tested. Each strategy has its share of positive and negative effects.

The first strategy is for schools to continue virtual learning until an effective vaccine or treatment is readily available and easily accessible to students. This strategy is the most impractical as a vaccine or treatment likely will not be available next year at the soonest. The negative effects staying remote will have on children will likely become irreversible at that point; students would probably benefit more from going into school and risking contracting the virus than they would if they stayed remote until a vaccine is widely available.

A second strategy would be to open completely; students return full-time to in-person learning, all five days of the school week. The strategy is currently being tested in a few countries such as Denmark where students wear masks, take their classes outdoors, and maintain adequate physical distance from their peers.

The third and so far most popular strategy is for schools to reopen at reduced capacity. Schools will reopen with fewer students physically present in the building. With fewer individuals being present, it will be easier to maintain social distance.

Similar to the previous strategy, the fourth and final strategy, Hybrid learning, involves schools operating at reduced capacity. In-person classes would resume with fewer students in the building, classes will continue to be live-streamed for students learning at home. Students would be divided into two groups (usually by their last name), and the groups would alternate days of in-person learning. For example, the first group (children with last names beginning with letters A-M) would attend school Monday, Wednesday, and Friday. The second group (children with last names beginning with letters L-Z) would attend school on Tuesday and Wednesday. Then, the next week, the second group would go in on Monday, continuing to alternate in-person learning days.

All four strategies would require schools to have the ability to perform rapid testing as well as contact tracing. The school and the students would need access to high-speed internet, which is harder to access in lower-income neighborhoods. Schools also have to be thoroughly sanitized and meticulously cleaned on a daily basis, which can be expensive.

Regardless of what state officials rule on regarding school reopening, the most important thing that can be done right now is to pay attention to other countries. There are no precedents for the situation the world's school systems are in, so countries must band together and learn from each other's mistakes and victories.

By June, over twenty countries had attempted to reopen, and now, the beginning of the new school year is only a few weeks away. We are seeing more and more schools reopen, trying different strategies. Although data from the reopenings are scarce and difficult to draw conclusions from as the process is ongoing.

"Evidence from other countries suggests that the most important factor to successful reopening is a low baseline rate of community transmission. A recent study found that compared with a range of countries that had reopened schools, the U.S. currently has significantly higher numbers of daily cases, cases per million population, and positivity rates. Updated Centers for Disease Control and Prevention (CDC) guidelines suggest low community transmission as a necessary prerequisite to safely reopen schools." (Tyler Barton and Anand Parekh, *Reopening Schools: Lessons from Abroad*)

In the Netherlands, schools opened after a steady decline in cases. The Dutch government actually opted to close schools in anticipation of the virus's first wave in early March, and as a result, was able to open schools in May when the daily number of cases were just above 150 per day. Thus far, they have not seen an increase in daily COVID cases related to

reopened schools. In Switzerland, class sizes were reduced to fifty percent, and tape markers are placed on the floor to indicate adequate spacing for social distancing. In Denmark, schools are placing students in groups of twelve, calling them "protective bubbles." The groups eat and play separately from each other, which allows for easy contact tracing if a child becomes infected with the virus. Schools in Japan and Germany are opting for the previously mentioned Hybrid strategy, where students alternate in-person learning days. With the process in such an early stage, it is difficult to tell which methods are proving to be the most successful, but thus far, these strategies seem to be working.

Not every country has been quite so successful, though. In Israel, schools reopened fully and quickly lifted social distancing guidelines and mask mandates. They soon saw massive spikes in cases, which ultimately resulted in closing schools again.

VII.   Policy

Since the coronavirus pandemic has halted students from attending higher education institutions, universities, and classrooms; many world leaders and local governments have taken the responsibility and initiative to decide a reformation for schooling during these dire times. In a report written by the United Nations titled *Policy Brief: Education During Coivd-19 and Beyond*, over 190 countries in all continents have been forced to halt and close down schools for the safety of students, teachers, and families. With the disruption of the educational system in these countries, 94% of students and around 99% of low-income countries have been gravely affected by the closure of schools and other types of learning institutions. This means that over 1.6 billion students would not be able to obtain the proper schooling or credentials needed to work in a high-income occupation. The pandemic has also caused a major loss of opportunities for refugees, women, and a person with a disability, etc. to have the support and programs needed for educational access. Many parents, students, and teachers have wondered what local, state, and national governments have decided for the future of each and every student, as well as the safety precautions needed to keep every person at home safe. Government officials over the past months seemed to have come up with similar policies surrounding student education and schooling.

Many countries around the world have seemed to have decided, in various different ways, to add basic medical education to all courses and majors in higher educational institutions. The Philippines is one of the main countries pushing for basic medical education to be taught in the classrooms. The country argues that if students have some sort of learning background in environmental and health education then they can become exemplified citizens who can take action in aiding medical workers; creating awareness of medical issues, progress, and reports; and help improve society's attitude and trust toward medics and medical students alike if there is ever a future pandemic predicament all people can try and help out. This can also lead to doctors and nurses feeling less pressured and underprepared in

the workplace if everyone has some sort of understanding or knowledge of the medical field to help not bombard them with another medical issue. Another policy that countries, including the Philippines and Turkey, are opting for is forming programs that bring medical students to get more involved in a community that they are a part of. This type of "community-oriented and community based medical learning" is argued to be able to help medical students better prepare and adapt for the worst-case scenario if it ever comes to pass again in the future. Turkey argued that this type of education for medical students would bring around a sense of social accountability in the students to help aid and better "respond to the needs of society", to help save multiple communities from suffering through another pandemic such as COVID-19.

Another major policy being discussed around the world is to strengthen medical services and student support services in schools so that students can prioritize mental and physical health for themselves and others, like people in their communities. Countries like the Philippines are hoping to focus more on bringing in counselors, medical staff representatives, phycologists, and other professional health experts to the aid of students whether it be inside educational institutions or outside in the comfort of their homes. It is widely known that a large number of adolescents have a great deal of anxiety, stress, and depression which keeps increasing in number daily. The *Healthy Minds Network for Research on Adolescent and Young Adult Mental Health* survey showed depression and being impaired by mental health increased dramatically over the years on college campuses. However, in a recent KFF tracking poll, the poll showed that one in ten children either suffer from anxiety or depression due to stress over school work and other responsibilities that their economic status has formed for them and now due to the lack of opportunities that the COVID-19 pandemic has caused to come to a halt. The *Household Pulse* survey also discovered that women are more likely to have symptoms of anxiety, depression, stress, or worry. This survey was conducted during April through July during the coronavirus quarantine, where women were 44.6% more likely to report symptoms versus the 37% of men who did report similar mental health symptoms. Therefore, if schools focus more on improving and strengthening mental health programs that are stemmed from schools, then students will feel more encouraged to seek medical help and treatment. The medical services can also strengthen the awareness of schools for other diseases and mental illnesses by posting information, symptoms, risks, and guidelines to seek help in school databases that are accessible to any student.

There have also been a few more policies that have not been as greatly talked about as the previous policies addressed in this paper. In the Philippines, government officials are looking for schools to implement hygienic practices into their daily routine in educational buildings and institutions. Schools, particularly in the Philippines, have decided to give students "health management tools" to help them learn to practice adequate hygiene which they hoped would become a major subconscious routine in educational institutions and also in public gatherings and settings. Another policy being debated by world governments to be implemented in school institutions is the reviving of outdoor education programs in

schooling. The United States, mainly the California and New York districts, has been spearheading for the policy to be enacted in their schooling system. These districts wish to teach their adolescent children in the schoolyards, parks, field trips, and residential science centers so that all students can safely distance themselves from one another while allowing students to be exposed to various scientific topics through hands-on learning experiences and activities. The California districts also argue that outdoor educators will be able to apply for jobs and positions at schools to help financially stabilize themselves since the pandemic has made them lose their jobs at many outdoor programs that had to be cancelled due to COVID-19.

Even though all of these policy implications are important to helping everyone readjust to schools opening, there is still a problem that our group believes needs to be addressed and solved immediately. Many countries like the United States, Canada, Ukraine, and Nigeria have decided to cut funding and spending for all schools in their country. The governments believe that the money should be used to prioritize medical, health, and social protection during the pandemic. However, from what our group has researched we strongly believe that schools should be given more funding so that they can open safely to prioritize the health of all students, teachers, and parents. Though COVID-19 has not led us to see the negative effects from cutting funding from schools, Sierra Leone's learning institutions had found themselves in a similar predicament during the Ebola epidemic. Sierra Leone's public education spending fell from 15% to 12% in funding between 2014 to 2017, which led to an education crisis in the country. During that time, evidence suggests that cuts in public education budgets have negative impacts both on learning and on college enrollment rates. The fall in education in Sierra Leone should be enough evidence to show that schools need more funding, especially during dire times, but the cuts are still happening. For example, in Ukraine, the education budget is set for a cut of around 4% (US$217 million) in 2020 to make more space to deal with COVID-related shocks. Reports from Nigeria also suggest that revisions to the federal budget will cut approximately 45% (US$130 million) off the budget for the Universal Basic Education Commission. This is why our group believes that there should be more funding put into schools, because schooling is just as important as protecting small businesses and medical institutions.

VIII.   Conclusion

World organizations have long held that children have the right to an education. In 1989, the United Nations adopted the *Convention on the Rights of the Child*, publishing a document stating in Article 28, "State Parties recognize the right of the child to education." and then lists ways these parties will ensure this right on the basis of equal opportunity for all. UNICEF also declares that "All children have the right to go to school and learn, regardless of where they live

or how much money their family has." This pandemic was unprecedented, and school closures were necessary to slow the spread, but that does not change the fact that most people agree all children have the right to learn, even if it is different this year.

COVID-19 affected everyone involved in education, from the students, themselves, to their parents and teachers, to school administrators. Remote learning does have benefits, and if implemented successfully could be a feasible option to teach students. While education systems had little time and resources to rapidly transition when schools were closed in March, often the decision came mere hours before students were expected to report at school for their regularly scheduled classes, for the upcoming school year administrators and government officials have had more time to plan and create a way to ensure all students learn effectively. Data on the pandemic's effect on education is small, especially as the COVID-19 crisis is still ongoing, but our research suggests the trends we have seen so far will continue. As schools worldwide reopen or continue remote, they should look back at the stark divisions the pandemic exposed. When everything returns to normal, and students are back in school just as before, administrators should remember that these divisions would not magically disappear. Our research shows how in general wealthier countries and individuals have experienced lesser effects of school closure. Our education systems worldwide hurt people with low socioeconomic statuses the most. But we can change that, and education systems should work to change that. They should find ways to bridge these gaps and make education more equitable worldwide because everyone should have the ability to receive a quality education.

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