

# ANALYSIS ON THE EFFECTS OF COVID-19 ON THE EDUCATION SYSTEM AND ITS RESPONSE: A LITERATURE REVIEW

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## Abstract

*Globally, the school sector has been significantly impacted by the Covid-19 epidemic. One of the first steps governments took to stop the virus's spread was to shut down schools, colleges, and institutions. More than 1.5 billion pupils were impacted as a consequence, which disrupted study and forced the cancellation of examinations. The results of pupils' learning have been significantly impacted by school closures. Students who do not have access to computers or the internet are unable to take part in online learning. Therefore, this crisis requires urgent attention and concerted action by all governments, stakeholders and society. The Covid- 19 pandemic is affecting education at all levels. Educational institutions around the world (192 countries) have either quickly entered or forcibly closed regions, affecting an estimated 1.7 billion people worldwide. Therefore, this paper aims to explore and highlight the implications and challenges of moving from physical education to online learning in the context of the Covid- 19 pandemic in developing countries.*

**Keywords:** Covid-19, Education, Online Learning, Physical Education, Pandemic

## INTRODUCTION

More than 1.5 billion children worldwide have been impacted by the Covid-19 epidemic, which has had a significant influence on the educational system (UNESCO, 2021). One of the first steps governments took to stop the virus's spread was to shut down schools, colleges, and institutions (UNICEF, 2020). Due to this, pupils' learning has been disrupted, and tests have been cancelled (UNESCO, 2021). Covid-19's impacts on education have been extensive, affecting not just children but also instructors, parents, and the entire educational system. The corona virus was first detected in December 2019 in Wuhan, Hubei province, China. The covid-19 outbreak is rapidly spreading not only in China, but throughout the world. This is why the world health organization (who) declared a pandemic on 12 March 2020.

When the corona virus pandemic swept the world over a year ago, no community or society was spared. COVID-19 is rapidly causing devastating socio-economic consequences such as lost income, business impact, and health problems (Shehzadi et al., 2021). The basic needs of consumers are affected. Lack of public awareness due to an unknown crisis has exacerbated the situation. Education is a challenge in itself in the context of a pandemic. On the one hand, there is a great risk of spread of COVID-19 in the school environment and closures are seen as a necessary measure to safeguard public health. On the other hand, the association between school and children's health, safety and life prospects is significant. This outbreak had a major impact on the education system. Educational institutions cannot afford these losses. The government has taken a number of measures to counter the threat of the spread of the virus. These measures include social distancing, school and university closures, travel restrictions, mandatory traveler quarantines, business closures, self-isolation, and bans on public gatherings, requests to work from home, closures and curfews. These measures are having a devastating impact on health, education and the economy around the world (Lederer et al., 2021).

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Economic predictions have already been revised downward due to the virus, and several nations are now experiencing a recession. A recession has a variety of negative effects on one's health. Economic downturns have been linked to poor mental health including an increase in homicide and suicide, as well as improvements in other health outcomes, including traffic injuries (Stuckler et al., 2009). 9 Progressive social policies may mitigate these negative consequences, because they are what ultimately decide the population's long-term health, not the recession itself (McCartney et al., 2019).

In developing countries, the right to use technology may not be available to all, and 80% of students may lose access to computers and the internet. Some schools and governments have provided digital equipment to students in need, such as in New South Wales, Australia, and many are still concerned that the pandemic will widen the digital divide (Douglas et al., 2020).

Following are the research questions.

Q1. How has the COVID-19 epidemic affected the international education system, taking into account elements like closings of schools, delays in instruction, and the financial effects on teachers, parents, and students?

Q2. How successful have governments been in reducing the pandemic's effects on health, education, and the economy? What steps have they taken to alleviate the problems it has caused in the education sector?

Q3. How wide is the digital divide in developing nations, especially when it comes to students' use of computers for distance study during the epidemic, and what impact has the provision of digital equipment had on educational outcomes?

### **LITERATURE REVIEW**

A community is any local collection of people who can get together in one place to share resources as a collective (Fatima et al., 2023). The economy and social fabric of each town are crucial to its growth. Local economic growth can be influenced by social, environmental, and economic concerns within a community through community development (Zaheer et al., 2023). The evolution from physical education to knowledge transfer and online courses continues. Since the physical education system is a tool for improving the skills acquired through decorative skills and public awareness, educational institutions have created practical conditions for refusing tutoring and supporting education. In the midst of the COVID-19 pandemic in Pakistan, the Open University has some problems, but HEC believes that some universities already offer continuous online learning, and Stigler is offering a systematic online learning system during the summer holidays (Akram et al., 2020). As for COVID-19, no one could have imagined that a single virus would be potent enough to endanger the world economy as a whole (Saleem & Iqbal, 2022).

With around 90% of the world's population affected by the shutdown, UNESCO has recommended continued online learning during the lockdown period, but competitors argue that online learning is difficult due to the poor economic situation in middle-income countries, while ignoring the facts from the widespread use of applications like Facebook in Pakistan.

The learning results of kids have been significantly impacted by school closures, especially for those without access to technology (OECD, 2020). Kids with special needs or those from low-income families have been disproportionately impacted (UNESCO, 2021). Also, a reduction in students' mental health and general wellbeing has been brought on by the absence of in-person education (UNESCO, 2021). In order to accommodate students who might not have access to computers, teachers had to become accustomed to remote teaching and modify their lesson plans (UNICEF, 2020). The closing of

schools has had an impact on parents as well since they now have to handle extra duties like childcare and supporting their children's distant learning (OECD, 2020).

The epidemic has brought attention to already-existing educational disparities and widened the attainment gap between low-income and high-income kids (OECD, 2020). Because that education is a crucial component of both economic growth and upward social mobility, this has major implications for community development (UNESCO, 2021). The economy has also been impacted by the closing of schools since working parents may have to cut back on their hours or quit their employment in order to take care of their kids (OECD, 2020). Governments and educational institutions have responded to the epidemic in a variety of ways, such as by implementing remote learning and giving pupils access to technology and the internet (UNICEF, 2020). In addition, several governments have given families financial aid to help with daycare costs (OECD, 2020). But there has been a discrepancy in the response, with some families and students receiving more help than others (UNESCO, 2021).

Education has been significantly impacted by the COVID-19 epidemic, especially in terms of community development. Students' access to education has been hampered by the closure of schools and institutions, especially for those living in low-income areas (Akram et al., 2020). This has brought attention to the educational disparities that already exist and made it challenging for kids to gain the abilities and information required to support the growth of their communities (Akram et al., 2020). For those who are interested in assisting marginalized groups in the local economy or in overcoming a particular challenge, like reducing local unemployment, increasing energy efficiency, or bettering community design, community and economic development are especially important (Arif et al., 2023). According to a UNESCO research from 2020, more than 190 nations and approximately 1.6 billion students were affected by school closures at the height of the epidemic. Significant learning losses have resulted from this disturbance, especially for pupils from underprivileged backgrounds who lack access to online learning materials. Lack of education access has the ability to aggravate already existing disparities and impede the social and economic advancement of communities.

The epidemic has also brought attention to the need for education institutions to be more flexible and crisis-responsive. The use of new technology and creative teaching techniques can aid in closing the achievement gap, but doing so demands major infrastructural and teacher training investments (UNESCO, 2020). The COVID-19 epidemic has significantly impacted education, especially in terms of community development, in conclusion. Inequalities have been brought to light by the disruption produced by school closings, which has also made it harder for pupils to obtain education. In order to respond to crises, authorities must prioritize the construction of flexible educational institutions and invest in the necessary infrastructure (UNESCO, 2020).

### ***Impact of Covid-19 on Education***

Going to School is the greatest public policy tool to develop skills and talents. School can be fun and increase skills and social awareness. The key to staying in school from an economic perspective is improving children's skills. Even at school, he managed to do it in a relatively short time. Even relatively short dropouts improve skills (Agarwal & Anand, 2021).

Students noted that online learning materials are mainly provided as online lectures and PDF lectures, followed by e-books, YouTube videos, university platforms, educational websites, and educational apps. Various online tools were used to access the online courses. The breakdown of these online tools is as follows: Zoom has the biggest lead, followed by WhatsApp, Google Classroom and

social media. Microsoft Teams, Edmodo, Skype and Google Meet are rarely used. Canvas, Edpuzzle, Adobe Connect, and Edverum are not as popular (Akram et al., 2020).

Several already-existing educational gaps have been highlighted by the COVID-19 epidemic and have even been made worse in a number of ways. For instance, the National Center for Education Statistics found that 96% of homes in the top income quartile had access to computers, but just 66% of those in the lowest income quartile had the same access (Gerosa et al., 2021). Many students were forced to rely on remote learning, which needed access to technology like laptops and high-speed internet, while schools were forced to close due to the epidemic. This brought to light the current digital gap and how low-income and minority pupils are disproportionately affected by it (Gerosa et al., 2021).

Also, kids from low-income families were negatively impacted by school closures because they were unable to receive critical programmes like free or reduced-cost meals and mental health treatments. Almost 20 million children in the United States depend on free or reduced-price school meals, and the epidemic interrupted access to these meals, according to a research by the Food Research & Action Center (Chilton et al., 2020). Because they might not have had access to the technology or transportation required to attend online therapy sessions, the epidemic also brought attention to the paucity of mental health options for students from low-income households. The COVID-19 pandemic has highlighted the differences in access to technology and basic amenities like food and mental health care that already exist in schooling. To guarantee that all children have equal access to educational opportunities, it is imperative to overcome these inequities (Gerosa et al., 2021).

### METHODOLOGY

The collection and analysis of statistical data on the number of school closures, the effects of distance learning on students' academic performance, the proportion of students without access to technology, and the financial effects of school closures on communities are some examples of quantitative research methods. Surveys, questionnaires, and official documents might all be used to gather this information. To better understand the experiences and viewpoints of students, teachers, parents, and policymakers on the effects of Covid-19 on the educational system and community development, qualitative research techniques may involve interviews with these groups of people. To find best practices and viable solutions for reducing the impact of Covid-19 on education and community development, case studies of schools, districts, and nations that have successfully adopted responses to the pandemic should also be done.

### RESULTS

Statistical Data	Source
800 million students worldwide affected by school closures	UNESCO, 2021
4 in 10 K-12 students in the US lacked internet access/devices for remote learning	Common Sense Media, 2020
School closures had a greater impact on students from low-income families	OECD, 2020
42% of rural households in India lacked access to smartphones	Agarwal & Anand, 2021
\$14.2 billion in lost productivity for working parents in the US during the first month of school closures	Economic Policy Institute, 2020
2 in 3 students worldwide reported higher levels of anxiety due to school closures	UNICEF, 2020

***Justification of Results***

- Across the world, 800 million pupils were still impacted by Covid-19-related school closures as of March 2021 (UNESCO, 2021).
- In the US, 4 in 10 K–12 pupils will not have sufficient internet connectivity or gadgets for remote learning in 2020 (Common Sense Media, 2020).
- According to an Organization for Economic Co-operation and Development (OECD) study of 28 countries, pupils from low-income households were more negatively affected by school closures than students from wealthy backgrounds, with a higher decline in academic achievement (OECD, 2020).
- According to a research, the Covid-19 epidemic has increased the digital gap in India, where 42% of rural families lack access to cell phones compared to 18% of urban households (Agarwal & Anand, 2021).
- In the United States, school closures have resulted in substantial financial losses, with working parents losing an estimated \$14.2 billion in productivity in the first month of school closures (Economic Policy Institute, 2020).
- UNICEF conducted a study of 15 countries and discovered that students' mental health and wellbeing were significantly impacted by the epidemic, with 2 in 3 students expressing increased levels of worry (UNICEF, 2020).

**DISCUSSION**

Social media is very important to many people and relying on this platform has its challenges. Not everyone has access to technology and Wi-Fi that is reliable, or convenient to use. And it can't replace the random, unplanned face-to-face meetings — on the streets, at community centers, and in the "third place" because there aren't many people out there. Many shared spaces remain closed or have limited access, reducing opportunities for casual and spontaneous community interactions that are difficult to maintain through scheduled online calls. People complain that they are "reduced". However, current evidence suggests that social media and face-to-face communication work best together.

The crisis has exposed the fragility and injustice in the lives of many, with overcrowded food banks and rising welfare dependency. People living in overcrowded housing, poverty, or precarious work suffer the most from the disease itself, as well as from the response to the pandemic. In this sense, returning to life as before was unacceptable. The Black Lives Matter movement focuses on racial inequality and emergencies and also raises issues related to age, the role of women, domestic violence, disability and mental health.

The COVID-19 epidemic has had a significant international impact on schooling, affecting more than 1.5 billion pupils. Governments all throughout the world closed down schools, colleges, and other educational facilities in an effort to stop the virus from spreading. This caused a major disturbance in the way that students learned, which culminated in the cancelation of assessments and the adoption of different teaching strategies. The pandemic affected not just kids but also teachers, parents, and the educational system as a whole. The World Health Organization declared the outbreak to be a pandemic in March 2020 after it was initially discovered in Wuhan, China, in December 2019. Because of a lack of public knowledge, the socio-economic effects of COVID-19, including lost revenue, business disruption, and health issues, have made it difficult to meet people's fundamental requirements.

The diverse effects of the pandemic have led governments to enact a range of policies aimed at controlling the virus's spread. Social distancing, travel limitations, obligatory quarantines for travelers,

business closures, self-isolation, prohibitions on public gatherings, requests to work from home, and curfews are some of these tactics. These policies have had disastrous effects on health, education, and the world economy, despite the fact that they are essential for public health. Revisions to economic forecasts have resulted in recessions in a number of countries, which can negatively impact mental health and general well-being. Progressive social policies are thought to have the ability to lessen the harmful effects of economic downturns.

In developing nations where not all pupils have access to internet, the epidemic has brought attention to the digital gap in education. In these areas, maybe 80% of kids will no longer have access to computers and the internet. Concerns about the possible expansion of the digital gap still exist, despite the fact that several governments and educational institutions have given students in need electronics. Understanding the pandemic's wider effects on the international education system, evaluating the efficacy of government initiatives to lessen these effects, and determining the scope of the digital gap in underdeveloped countries are the objectives of the research topics introduced in this context.

The literature study emphasizes how important community development is in light of the problems posed by the pandemic. By tackling social, environmental, and economic issues, communities—which are seen as local groups of people sharing resources—have a significant impact on local economic progress. Since the epidemic has brought attention to the necessity for educational institutions to be adaptable and crisis-responsive, the shift from traditional classroom instruction to online courses has intensified. School closures have generated disruptions that have made educational inequities worse and affected kids' access to education, particularly in areas with lower incomes. The pandemic has also highlighted how crucial it is to fund teacher preparation programs and infrastructure in order to enable cutting-edge instructional strategies and the use of technology in the classroom. The analysis of different learning modalities throughout the pandemic sheds additional light on the effects of COVID-19 on education. These days, it's common to find lectures, PDFs, e-books, and videos among other online learning resources. Nonetheless, accessibility issues have been brought up by the use of these materials, especially for pupils from low-income homes. The pandemic has highlighted already-existing gaps in schooling, making differences in access to computers and the internet more pronounced. Due to the fact that minority and low-income kids have been disproportionately impacted, there is an urgent need to rectify these disparities in educational opportunity.

The COVID-19 epidemic has had a significant impact on parents, teachers, students, and the socioeconomic fabric as a whole, with far-reaching effects on the global education system. The disturbance brought about by closing schools has brought attention to and widened the gaps in education that already existed, underscoring the necessity of adaptable and crisis-ready educational establishments. In order to guarantee equal access to education, the epidemic has highlighted how critical it is to solve the digital divide, especially in underdeveloped countries. Proactive steps in community development, education, and socioeconomic policies are becoming more and more important as the world struggles to address the pandemic's issues in order to lessen its long-term effects on both individuals and communities.

### **CONCLUSION**

Current research indicates that the containment of the COVID-19 pandemic affects the academic achievement of most participants to varying degrees. Online learning helps students work and work with self-directed learning opportunities. However, the biggest challenge for online veterinary education is hands-on learning. Because most of the subjects are practical, so it's not easy to learn online. It is difficult for students to apply veterinary skills only through online learning systems. Online learning can be

improved by making it more interactive, demonstrating medical procedures in real situations, providing concise information, and providing 3D virtual tools that simulate real situations. Thus, it can be said that the Covid-19 epidemic has had a tremendous effect on the educational system, with repercussions that extend to students, teachers, parents, and communities. The pandemic response has brought to light existing educational disparities and the need for more funding to promote community development.

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