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Understanding the Impacts of COVID-19 on Educational Trends

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Abstract

The influence of COVID-19 on school education has been extraordinary. Training is more revolutionary today than it was centuries ago when it was first introduced. If anything, the global outbreak has taught the world that - change is inevitable. The decision to shift from traditional classrooms to digital platforms is growing learning inequalities among children and, as a result of the digital divide, a substantial number of youngsters are dropping out of school. COVID-19 has acted as a catalyst for educational institutions to grow and use platforms with previously unexplored technology. This paper highlights the impact of the global pandemic on students and the emerging platforms for e-learning with a broader objective to gain an insight into greater complexities and parameters through a PESTLE analysis and uncovering response of the Indian government. In an attempt to press the importance of digital learning the paper also puts forward suggestive measures and fruitful recommendations.

Keywords: *education, COVID-19, digital, government, students, learning, adaptation*

1.0 Introduction

The recent COVID-19 crisis has shone an unbeatable light on the vulnerabilities and challenges people face; society has been forced to maintain social isolation as a result of this. Thousands of people have died as a result of the pandemic, which poses an unprecedented threat to many facets of human life and the education sector has taken the brunt of the damage. The absence of educational options has damaged people with less money, but those with more funds have found education. People throughout the world who depend on schools rather than technology have had more difficulty acquiring education as a result of new online initiatives moving educational responsibilities from schools to families.

COVID-19 has the potential to halt several years of progress, particularly in terms of poverty and gender equality. It is evident that the world cannot return to its previous state, while some people strive to adjust to working from home and taking classes online. The pandemic presented a number of issues in public and private schools, including an increase in dropouts, learning losses and the digital divide. The epidemic also called into question the systems' readiness, especially instructors', to deal with such a catastrophe, as well as the long-term

viability of private schools.

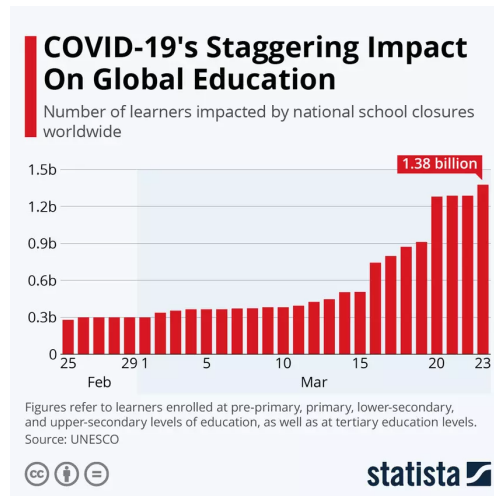


Image 1.0: UNESCO, 2020. COVID-19's Staggering Impact on Global Education

Source: *Statista*, 2020

In further exploration of the following, the paper aims at understanding the recent developments in the education sector in lieu of the pandemic, the different education-related initiatives implemented by the Indian government and its impact on various parameters on students as a result of changes in educational patterns. This paper also attempts to build upon and study various existing policies and recommendations for the same. The overall direction of appropriations is not confined to tackling pandemic-related challenges, but also to extending beyond that. COVID-19 has provided governments with an opportunity to acquire significant policy lessons for dealing with such circumstances, as well as to reform the system to make it more capable of dealing with them.

2.0 Evaluating Pre and Post COVID-19 Educational Scenario: An Overview

2.1 Pre-COVID Scenario

Online education has always been viewed as an alternative pathway, one that is particularly well suited to adult learners seeking higher education opportunities. In the pre-COVID world, educational institutions relied more on the traditional ways of teaching which includes face to face classroom teaching. Educational institutes included close interaction among faculty and pupils, which paved the way for the holistic development of

children through personal relationships and understanding. In the classroom, students were provided with opportunities to develop leadership skills, team bonding activities, exposure to various nuances of sportsmanship and practical experience of learning that prompted self-discipline. Teachers and peers in a classroom setting were considered as an escape to the realities of the outside world and given a chance to become the best of themselves. Although, paperback textbooks were the sole source of learning and digital platforms served as a secondary, there was certainly more.

2.2 Post-COVID Scenario

Following the pandemic, the education industry created an opportunity to obtain new and better professional skills in a more effective and productive manner through online learning. In response to the difficulty of educational institutions being closed around the country, the Ministry of Human Resource Development (MHRD) set up online portals and instructional channels via Direct to Home TV and radios to allow students to continue their studies. During the lockdown, students began using popular social media applications for online teaching and learning systems, such as WhatsApp, Zoom, Google Meet, Telegram, YouTube Live, Facebook live and others.

The following are the MHRD's digital projects for secondary and higher education during COVID-19 :

1. Secondary Education

- a. **Diksha** portal contains curriculum-aligned e-Learning content for students, teachers and parents, such as video lessons, worksheets, textbooks, and assessments. The content was generated by more than 250 instructors who teach in multiple languages under the supervision of the country's national boards of education- Central Board of Secondary Education (CBSE) and the National Council of Educational Research and Training (NCERT). It offers over 80,000 e-Books in several languages created by CBSE and NCERT for classes 1 to 12. QR codes on textbooks can also be used to view the contents. The app is available on both the Apple App Store and the Google Play Store

(Jena, 2020).

- b. **e-Pathshala** is an e-Learning software by NCERT for classes 1 to 12. The app houses books, videos, audio, etc. aimed at students, educators and parents in multiple languages including Hindi, Urdu, and English. NCERT has uploaded 1,886 audios, 2,000 videos, 696 e-Books and 504 Flip Books for classes 1 to 12 in several languages on this web page. Apps for mobile devices are available (Jena, 2020).
- c. **The National Repository of Open Educational Resources (NROER)** portal offers a variety of resources in multiple languages for students and teachers, including books, interactive modules and videos, as well as a variety of STEM-based games. For classes 1-12, content is mapped to the curriculum, and teachers' materials are aligned. It has a total of 14,527 files in various languages, including 401 collections, 2,779 papers, 1,345 interactive, 1,664 audios, 2,586 photos, and 6,153 videos (Jena, 2020).

2. Higher Education

- a. **Swayam** is a national online education portal that offers 1,900 courses in areas such as engineering, arts and social sciences, law and business to students in grades 9 through 12. Its distinguishing feature is that it is seamlessly blended with traditional education (Jena, 2020).
- b. **Swayam Prabha** has 32 DTH TV channels that broadcast educational content 24 hours a day, seven days a week. These channels can be viewed using a DD Free Dish Set Top Box and Antenna everywhere in the country. The portal contains the channel schedule as well as other information. In the arts, science, commerce, performing arts, social sciences and humanities subjects, engineering, technology, law, medicine and agriculture, the channels cover both school education (classes 9 to 12) and higher education (undergraduate, postgraduate, engineering out-of-school children, vocational courses, and teacher training (Jena, 2020).
- c. **E-PG Pathshala** is for postgraduate students. During the lockdown,

postgraduate students can use this platform to access ebooks, online courses, and study resources even without a sound connection to the internet (Jena,2020).

3.0 COVID-19 and Educational Institutes

3.1 International Student Mobility

The pandemic has impacted learning and course material delivery, international students' safety and legal status in their host countries and students' perceptions of the worth of their degree. They have serious ramifications for some higher education institutions' financial models, as international students pay greater tuition rates than domestic students. In the next few years, a decrease in international student mobility in these nations may have an impact on productivity in advanced areas such as innovation and research. International student mobility has long been used by countries to facilitate the immigration of foreign talent and contribute to national knowledge production and innovation. The current crisis's lockdown measures have had an impact on how learning is delivered and how studying abroad is experienced.

In fact, there are travel limitations, visa delays and other difficulties. It's conceivable that public health policies made the opportunity unfeasible. A closer inspection of data from prominent host countries reveals a number of emerging themes. Enrollment of international students reveals a significant variance based on the length of study (i.e. students who planned to engage in a short-term exchange (usually one year or less) and students who planned to participate in a long-term exchange who intended to finish a degree programme (Schleicher, 2020).

- **The number of short-term exchange students has significantly reduced.** Short-term exchange students may have chosen to travel to a different destination or forgo the in-person study abroad experience entirely as programmes were postponed or cancelled (*International Student Mobility Flows and COVID-19 Realities*, 2021b)
- **Enrollment of international degree-seeking students remained constant.** This pattern could be caused by a number of things. First, some nations reported drops in

2020 commencement figures, indicating that international students paused or slowed their academic studies, allowing them to stay enrolled at their host institution for extended periods of time (*International Student Mobility Flows and COVID-19 Realities, 2021b*). Many universities also offered assistance to continuing international students who had already arrived in the country and wanted to continue their studies. As a result, the number of continuing international students remained stable, with losses noted mostly in the number of new international students enrolled.

- **Enrollment figures varied when looking closely at institution type.** Large research institutions appeared to do better than other institutions, and increased enrollment at research institutions appeared to counterbalance decreases at smaller universities in certain countries (*International Student Mobility Flows and COVID-19 Realities, 2021b*)

3.2 Adaptation to Digital Teaching

Digital technologies offer an entirely new perspective on what it is to be human, as well as what people learn, how they learn, where they learn, and when they learn, going far beyond a crisis band-aid. For their own professional growth, teachers, on the other hand, do not rely heavily on remote learning. More than twice as many people reported taking online courses or seminars as taking in-person courses or seminars. Teachers have expressed a strong need for training in the use of Information and Communication Technology (ICT), with 60% requesting it (Schleicher, 2020). Professional development in ICT was regarded as a high necessity by 18 per cent of respondents. With tremendous granularity and precision, the systems adapt to the learning experience to suit students' specific learning methods. Virtual laboratories, likewise, serve an important role in allowing students to design, conduct, and learn from experiments rather than just studying about them. Given the drastic move toward online schooling during the COVID-19 lockdown, ICT skills are especially vital.

Furthermore, an Instituto Peninsula poll found that 83 per cent of Brazilian instructors do not believe they are equipped to teach remotely, 67 per cent are concerned, 38 per cent are exhausted, and less than 10% are happy or satisfied (Schleicher, 2020).

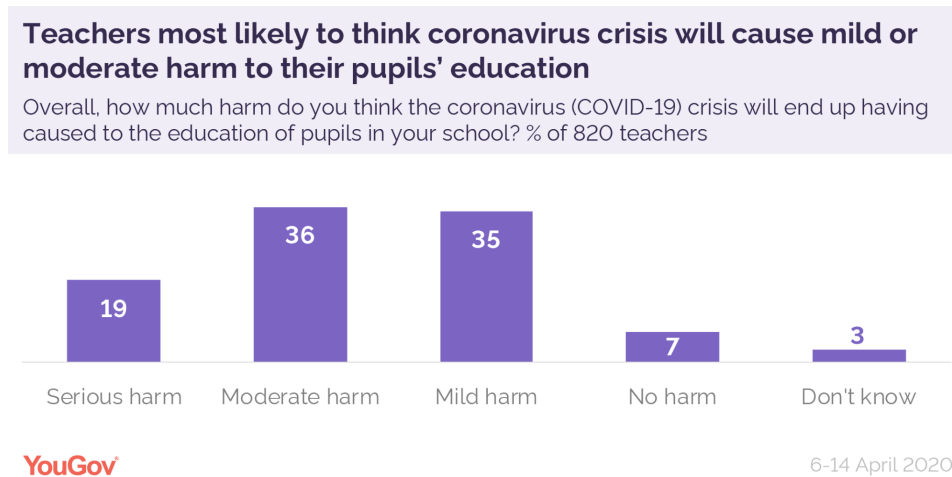


Image 2.0: YouGov: At least 44% of teachers know pupils who can't access education due to technology issues

Source: *Smith, 2020*

3.3 Vocational Training during Lockdown

While remote learning has provided some educational continuity in terms of academic learning, the crisis has impacted Vocational Education and Training (VET) all around the world. India's evolving Technical and Vocational Education and Training (TVET) ecosystem encountered numerous problems. VET programmes face a twofold disadvantage when compared to general programmes, as social distancing requirements and the closure of organisations have made practical and work-based learning, which is important for the success of vocational education, difficult or impossible. Many of the occupations that supported economic and social activity during the lockdown rely on vocational skills (Schleicher,2020).

Practical teaching is an important aspect of the VET curriculum, whether it is school-based or a combination of school and work-based programmes. This entails hands-on experience in workshops, laboratories or the workplace, as well as specialised equipment and trainers who pay close attention to ensure that tasks are completed correctly.

The majority of skill development programmes in the country are delivered in a classroom setting which led to several organisations encountering significant infrastructure and human resource related issues while bringing their operational models online overnight. Participants

from low-income families did not have access to digital infrastructure. On the other hand, trainers lacked the necessary tools to deliver virtual instruction, particularly while working from home. Despite the fact that internet access has increased from 27% to 50% in India over the last five years, the majority of young people who attend skill development programmes have extremely limited access to smartphones and data connectivity (Keelery, 2021). And yet VET programmes are often attractive to companies and provide students with great employment prospects, the pandemic has created considerable uncertainty over what will happen next. During the COVID-19 pandemic, there was a boom in self-learning apps and virtual programmes. However, maintaining the same level of training quality with a digital delivery paradigm is difficult. There are logistical challenges, issues with the trainers' approach to digitally engaging pupils, and issues with participants' commitment to learning online.

3.4 Parameters for Reopening School

Classroom disruptions have a significant impact on a student's capacity to learn. The longer marginalised children stay absent from school, the lower their chances of returning. Children from the poorest families are nearly five times as likely to drop out of elementary school as children from the wealthiest families (Schleicher, 2020). School absences raise the likelihood of sexual exploitation, child marriage, violence, and other dangers. Extended closures jeopardise important school-based programmes such as immunisation, school meals, mental health and psychosocial assistance, as well as causing stress and anxiety owing to a lack of peer interaction and disrupted routines. Reopenings of schools must be safe and in line with the overall COVID-19 health response, with all reasonable precautions taken to protect children, staff, teachers and their families.

- **Class Strength**

One of the most effective techniques for preventing the spread of the COVID-19 has been social distancing. In the context of a school, this entails limiting interaction between groups of children and keeping a safe distance of 1-2 metres between students and staff. Many countries, including India, have been reducing or halving class sizes in

order to maintain the required spacing between students.

Many elements, such as classroom size, room availability, and the number of students in each class, will play a role in ensuring a minimum safety distance between students and staff. Countries with smaller class sizes, providing they have enough space to safely accommodate the required number of children, may find it easier to comply with the social distancing regulations. Given the current scenario, most countries have kept distance learning in place until the conclusion of the academic year to assist students.

- **Adequate Infrastructure**

As schools were prepared to reopen in India from 7th February 2022, the norms of the new world demanded a new approach to school infrastructure. According to the District Information system of Education (DISE), there are 53,533 single classroom schools in India. The student classroom ratio (SCR) is 35 or higher in 19% of schools, while more than 50 children sit in one classroom in 8.3% of schools or roughly 1.3 lakh schools. Non-teaching support personnel must finish any administrative and financial work that has been halted due to the prolonged closure before schools reopen. Teachers' cleanliness is also highly important. Currently, the school education system employs over six lakh teachers over the age of 55. In the middle of the COVID-19 pandemic, clean and proper WASH (Water, Sanitation, and Hygiene) facilities are a must for schools to reopen safely. However, just 52% of schools have complete washrooms, which include drinking water, functional toilets, and handwashing facilities. They are also more prone to COVID-19, according to the evolving illness pattern. However, at most schools, all teaching and non-teaching employees share a single staff room (Schleicher,2020).

- **Vaccination Status**

This is an important consideration because congregating with unvaccinated or partially vaccinated students and teachers might be hazardous to one's health. Doses are being distributed at a cautious and steady rate with the goal of immunising everyone in the

country. As of November 2021, 43 crore people are fully vaccinated only which is 31.2% of the entire population. While talking globally, only 42.7% of the population is fully vaccinated (Schleicher, 2020). This data is being analysed by educational institutions as a crucial factor in pandemic response.

4.0 Impact of COVID-19 on Education (PESTLE Analysis)

4.1 Political Impact

- Online Education Creating Digital Divide: As a result of school closures to ensure the health and safety of children, education has shifted to digital platforms, either through online learning or through blended learning, government portals and techniques Direct-to-Home (DTH) channels, as well as others remote-control vehicles, on the other hand. Given the wide disparities in access to information in India, electricity is part of the basic digital infrastructure. While almost 99.9 per cent of homes in India have a power connection, the quality of electricity supply is very poor, especially in rural India. Only 47 per cent of rural households receive electricity for more than 12 hours (Kundu, 2020). While the internet has aided in the advancement of education and learning, it has also given rise to a number of cyber-related crimes such as hacking and cyber-bullying, as well as exposing children to graphic and violent information that can incite, corrupt, and influence young minds. According to the Delhi Deputy Chief Minister, there is a concern that online education would contribute to a digital gap. It will be difficult to close the gap if there is a learning divide between those who have access to digital technology and those who do not. The mantra of the Delhi Government's teaching and learning strategy is "learning with human feel." (Kundu, 2020)

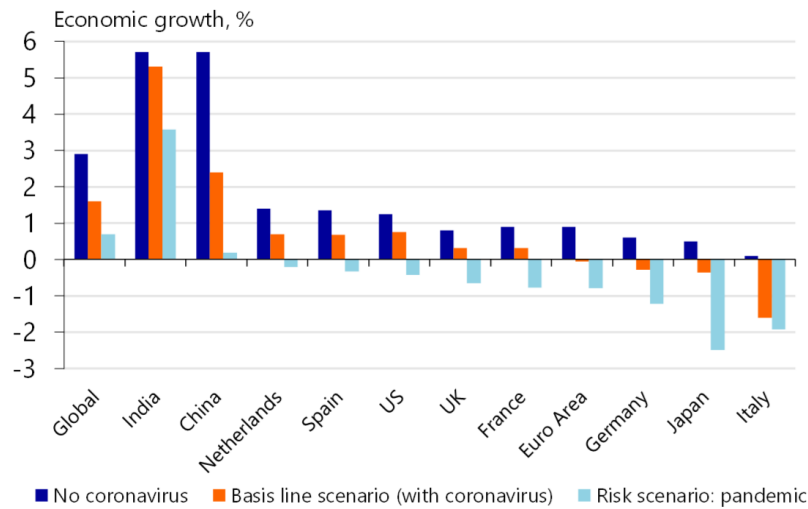
4.2 Economic Impact

- Employment: The education system was coerced to slam its brakes and come to a standstill putting at risk the learning for more than 280 million students of this country. A nearly 18-month gap, along with the economic challenges experienced by families as a result of the estimated 7.35 million job losses and the scaling down of more than

60% of MSME, puts our demographic dividend in danger (EducationWorld, 2021). Economic challenges may push families to reevaluate their educational investments and put their extra hands to work at home. As a result, there will be a "learning loss," which will be catastrophic to any economy at a time when knowledge and ability are seen as the driving factors. The exodus of students from such a huge educational system, fueled by private educators, could trigger a new economic downturn, resulting in employment or income losses for teachers and staff.

- *Reduction in Investment in Education by Families*: Because of the investments made by families in education, the Indian economy has grown into an information technology powerhouse with a vibrant startup ecosystem. The reduced investment will inevitably deplete this workforce, causing the economy to return to its agro-industrial roots.
- *Losses in Potential Earnings due to Missed Years of Schooling*: It is commonly known that as a person's education level increases, so does their income. Every year of further education raises a person's annual wages by 9.7% on average (Montenegro and Patrinos 2014). As a result, each year of schooling lost equates to a 9.7% reduction in potential earnings. This is the average rate of return for each year of schooling that is not adjusted for learning. Every student in developing Asia, who is affected by school closures, loses an estimated \$180 per year, equating to a 2.4 per cent loss in average annual wages. East Asia (\$771) has the biggest potential earnings losses per student, and typical earnings were also the highest prior to the COVID-19 outbreak. The percentage decline is highest in East Asia (4.0%) and in South Asia (4.0%), where school closures have been the longest ("Learning and Earning Losses from COVID-19 School closures in Developing Asia," 2021). It will be many years before the precise consequences of COVID-19 school closures on today's students' actual incomes are completely understood. Current students, on the other hand, can benefit from policy actions that assist them to avoid possible losses.

Figure 3.0: Global Economic Impact of COVID-19



Source: RaboResearch, 2020. *Coronavirus: The Economic Impact of COVID-19 on India*, P. 3

4.3 Social Impact

- Increase in Gendered Impact:** The COVID-19 pandemic had a major impact on education and training; however, not all students were affected in the same way. Female students suffer disproportionately more challenges in sustaining their learning progress during school closures for a variety of reasons. Reversing this tendency will be tough with the reopening of schools on the horizon. According to UNICEF research (UNICEF Education COVID-19 Response, 2020), the majority of families around the world will prefer boys' education over girls' education if they can only afford education for one or a few of their children. School closures may have helped contain the virus, but they have greatly deteriorated the global education situation. An estimated 1.4 billion students were stranded at home at its peak in April 2020. This resulted in a slew of negative consequences, especially for young women and girls (Global Education Coalition. UNESCO, 2021). There has been a considerable rise in early marriages and adolescent pregnancies, as well as an increase in domestic abuse against girls and women (Ending child marriage and adolescent empowerment. UNICEF, 2020). Early weddings are typically seen as a way for girls/women to get out of poverty by their families, yet, like adolescent pregnancies, they often result in early school dropout and no income for the girls/women.

- *Impact on Disabled Candidates*: Despite being a population that is particularly vulnerable to COVID-19, people with disabilities face even greater barriers to healthcare and education during the pandemic, due to inaccessible digital platforms information and environments, as well as selective educational guidelines and protocols that may exacerbate discrimination against people with disabilities. People with disabilities are less likely than others to finish their education and are more likely to be completely excluded from school. Most states have temporarily closed education institutions as a result of COVID-19, affecting all students, including students with impairments. Some states are implementing remote learning strategies to mitigate the impact of disruption in education. In many circumstances, however, students with disabilities face obstacles due to a lack of requisite equipment, internet connection, accessible materials, and assistance to enable them to participate in online school programmes. As a result, many students with disabilities, particularly those with intellectual challenges, are being left behind.
- *Mental Health (Stress and Anxiety)*: The COVID-19 pandemic has had a severe influence on school and higher education as a result of the long-term pandemic situation and onerous measures like lockdown and stay-at-home orders. These circumstances highlighted the critical need for intervention and prevention initiatives to address student mental health.
- *Lack of Communication and Interpersonal Relationships among Peers*: Online mode of education is leading to lack of communication and personal relationships among students which can be built only in the physical mode of education.

Estimated impacts of COVID-19 on Learning Poverty

For every 100 children in low- and middle-income countries

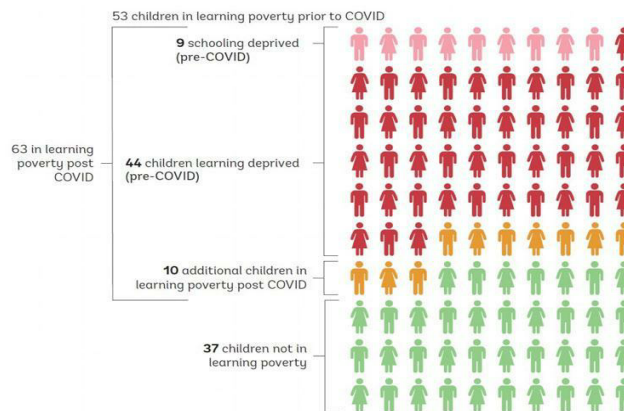


Image: 4.0: Estimated Impacts of COVID-19 on Learning Poverty

Source: *Worldbank, 2020. How could COVID-19 hinder progress with Learning Poverty? Some initial simulations*

4.4 Technological Impact

- Streamable Lessons provide Flexibility: As a result of the Coronavirus outbreak, 70 per cent of the world's students, are being left out of schools (Education: From Disruption to Recovery, 2022). The majority of educational institutions made the decision to use a live lesson streaming procedure as their first step. This allowed students to study on a regular basis and not miss any classes during the semester. Pre-recorded classes also allow students in different time zones to learn when it is most convenient for them. Online classes have been the most prevalent measure taken by educational institutions, thanks to video chatting services like Zoom.
- Distance Learning Solutions: As a result of the abrupt transition in education, there has been a surge in the use of online MOOCs all over the world. A growing number of people are turning to the internet to improve their skills and offer training programmes. Be it virtual learning, certification programs, or language learning apps; such software has taken a leap in its user numbers. Moreover, many platforms also offer free programs to encourage students to sign up.
- Personalised Learning and Access to Resources: Technology also helps students receive individualised attention. Smart devices help kids even when they adjust to a

new routine. Learning solutions provide a nearly infinite number of customised approaches. Moreover, despite the abundance of information available on the internet, the pandemic has brought to light several bright and free choices that were previously unpopular. The options include open digital libraries in addition to free and cheap ed-tech tools. These provide free access to a new set of learning materials for students and teachers all across the world.

- *Creative Teaching Methods*: While many teachers use the lecture method, some use more creative methods to deliver their courses. Many have proposed providing education that is relevant in real-life circumstances in addition to a focus on activities. Students are receiving a higher-quality education in some circumstances. In hands-on professions, however, creativity is frequently blended with ed-tech. Simulators for learning have been developed as a result of technological advancements.
- *Rise of Indian EdTech*: Between January 2014 and September 2019, more than 4,450 EdTech businesses were formed in India, indicating a shift in the country's IT sector and a trend toward education. Digital adoption gave the sector a much-needed boost, with nearly half a billion internet and smartphone users contributing (Tata Elxsi - Impact of the Pandemic on the Edtech Sector: An India Perspective, 2020). Pre-COVID-19 and during/post-COVID-19 can be used to compare the EdTech sector in India. Prior to the epidemic, India's EdTech business was growing, albeit at a slower pace, because online education was still encountering some resistance. Teachers' reskilling and upskilling were hampered by a lack of technology. While the pandemic has caused havoc on India's economy across sectors and industries, it has been a watershed moment for the country's EdTech sector. The lockdown and fear of COVID-19 spread have taken schools, colleges and educational institutes online, resulting in the emergence of many EdTech products and services, as well as an increase in usage. Though in its nascent stage, there has been a huge shift in curriculum creation and pedagogy, as the world has evolved from thinking to being digital.

4.5 Legal Impact

- *Inordinate Fees*: Most parents agree that a price decrease is justified, given that many have been struggling with layoffs, wage cuts and increased financial difficulties at a time when the country is experiencing a full-blown humanitarian catastrophe. Schools contend that, as a result of lower school fees and lower revenue, institutions are considering wage cuts for their teaching personnel. While paying fees for education, parents and students expect to get full exposure and a good learning experience but due to ongoing conditions, they are not getting appropriate education instead of paying the same amount of fees. During the COVID outbreak, schools and teachers had an uphill battle in transitioning classrooms completely online without sacrificing the quality of the teachings. Furthermore, neither school administrations nor parents want to trade off teachers' wages and compromise instruction standards. Fee reductions during pandemics are certainly a welcome relief for parents, but the real need of the hour is undoubtedly a better dialogue between schools, parents' associations, and the government (Deshpande, 2021).

4.6 Ethical Impact

- *Concerns over Privacy*: The use of several government-sponsored platforms, such as Diksha, e-pathshala, the National Repository of Open Educational Resources, and others, is not limited to teacher-student communication (the recording of which is also intrusive), but also student assessment, test results, attendance, class participation, chat-box, and other educational activities. Because these platforms have enormous data collecting and processing capabilities, they are both privacy-invading and very vulnerable. As a result, these platforms become fodder for government and private players to establish a culture of control and exploitation based on datafication of children's bodies, which views data as an extension of the body (Bajpai, 2020). Data protection and privacy are jeopardised by the collecting of personal information into big databases and its subsequent usage, often without consent. This is especially true when private actors use data for profiling purposes, allowing them to advertise to minors (Bajpai, 2020).

- Unbefitting Services: Due to the pandemic, the educational services and exposure that was promised to students and their parents are inadequate. Studying while sitting under four walls can give ample theoretical knowledge, considering the fact that practical applications of that knowledge can't be taught. This is thereby impacting the education system too as resulting in dissatisfaction and lack of interest by students.

5.0 Possible Changes to the Existing Government Policies and Budgetary Interventions

5.1 Children Lose Out on Early Childhood Care and Education (ECCE)

In India, the ECCE services are largely provided through the Anganwadi Centres (AWCs) under the Integrated Child Development Services (ICDS) scheme. In 2019, 30 million children aged 3-6 years benefited from the scheme, which was implemented in 1.37 million AWCs (MWCD, 2020). As a result, it's very likely that the disruption of ICDS services caused by the lockdown during COVID-19 had a significant impact on these children's health, nutrition, and learning. Preschools are critical in building the groundwork for a child's optimal psychological, physical and social development, in addition to early learning. Closures of schools and other institutions that provide early childhood care and education continue to constitute a significant threat to children's overall development. The Anganwadi Workers (AWWs) are now additionally burdened with COVID-19 duty as also the delivery of rations to households in various states. As a result, they no longer have time to address children's educational needs.

Existing Policies and Budgetary Interventions:

1. For the all-round development of children, the Chhattisgarh government (Department of Women and Child Development) and UNICEF have launched the 'Chakmak Abhiyan' and 'Sajag Abhiyan.' In this programme, children are given enjoyable activities to be performed with their guardians at the residence itself.
2. Many of the State governments have launched schemes to provide benefits to Anganwadi workers and Anganwadi helpers.
3. In the Recent Budget 2022, there was a welcome announcement of upgradation of two lakh Anganwadis to Saksham Anganwadis that have better infrastructure and

audio-visual aids, and which will have improved education facilities for three- to six-year-old children (Mundra & Kheria, 2022).

5.2 Impact of School Closures on Nutrition and Health of Children

The Food and Agriculture Organisation, in collaboration with other UN agencies, presented its flagship study, *The State of Food Security and Nutrition in the World 2020*, which painted a bleak picture, including the impact of COVID-19 on school closures and school meals. According to real-time monitoring technology, 369 million children worldwide were missing out on school meals as of April 2020, the peak of school closures, with the majority of them in India. The recent Global Hunger Index (GHI) report for 2021 ranks India at 101 in the category 'alarming', behind our neighbours Pakistan, Bangladesh and Nepal (Impact of COVID-19 on School Education in India: What Are the Budgetary Implications?, 2020). The index is a combination of indicators of population undernutrition as well as wasting (low weight for height), stunting (low height for age) and death in children under the age of five. We are already well behind schedule in terms of fulfilling the 'Zero Hunger' target, and the situation will only worsen unless urgent efforts are taken to address the matter, both through essential administrative measures and their effective implementation (Impact of COVID-19 on School Education in India: What Are the Budgetary Implications, 2020).

The Mid Day Meal (MDM) is an important aspect of Indian children's diet. It is one of the government of India's most essential interventions, with various benefits including minimising class hunger, increasing school attendance and tackling malnutrition. As the schools closed across the country, the school feeding programme could no longer provide the much-needed free lunch to 115.9 million children who are enrolled under the scheme (MDM Portal). Even Prior to COVID-19, only 50% of rural and 21.4 per cent of urban pupils stated that the institution provided a free mid-day meal (NSO, 2019).

Existing Policies and Budgetary Interventions:

1. The MHRD has urged states/UTs to distribute pulses, oil, and other commodities (equivalent to cooking cost) along with food grains as Food Security Allowance (FSA) to eligible children instead of sending the cooking cost to their or their parents' bank

accounts (MDM Portal).

2. Following COVID-19, the Union HRD Minister announced in April 2020 that the yearly central allocation of cooking cost (for procurement of pulses, vegetables, oil, spices, and fuel) under MDM had been increased to Rs. 8,100 crore from Rs. 7,300 crore (an increment of 10.99 per cent) (Impact of COVID-19 on School Education in India: What Are the Budgetary Implications, 2020).
3. In Budget 2022-23, an estimated budget of Rs 10,234 crore has been sanctioned to the Pradhan Matri Poshan Shakti Nirman (PM POSHAN) programme. This scheme was earlier known as the 'National Program of Midday Meal in Schools' and provided hot cooked meals to school children between the ages of 6 and 14 years. Last year, the revised estimate was Rs 10,234 crore (Union Budget 2022–23: Will It Help Children Eat Better, 2022b).

5.3 Increase in the Number of School Dropouts

In India, school closures have affected 320 million students (UNESCO, 2020a). However, only 37.6 million children across 16 states are continuing education through various education initiatives such as online classrooms and radio programs etc (UNICEF, 2020a). A recent survey by Save the Children during the pandemic reports the discontinuation of children's education in 62% of the surveyed households with 67% in rural and 55% in urban areas respectively (Save the Children, 2020). Widespread unemployment and income loss will make it difficult for families to afford to keep their children in school. This will have a higher impact on disadvantaged households that may be facing financial difficulties. This will lead to children dropping out of school and being drawn into economic activities in order to supplement their parents' income.

Even before COVID-19, the condition of dropout rates and out-of-school children was severe. According to the NSS 75th Round Household survey 2017-2018, around 3.22 crore children in the 6-17 year age group are out of school, 31 per cent of whom I have never attended any school (NSO, 2019). These figures were higher for rural areas as compared to urban areas.

Existing Policies and Budgetary Interventions

1. Scholarships are distributed based on available finances rather than demand, therefore even when there is a high demand for scholarships, the number of accessible scholarships is limited. A restricted number of philanthropists are eligible for scholarships. The education budget for 2022 has been allotted Rs 1,04,278 crore- a rise of Rs 11,054 crore from the previous year. The education budget allocation for 2021-22 was Rs. 93,223 crores, which was reduced by 6% as compared to the year before. The revised estimate was Rs. 88,002 crore (Impact of COVID-19 on School Education in India: What Are the Budgetary Implications, 2020).
2. The Samagra Mahagra Shiksha Abhiyan (SMSA), a critical project for providing comprehensive school education from preschool to senior secondary level, has been underfunded from the outset.
3. In Budget 2022, the Finance Minister announced plans to set up a digital university with the Indian Society for Technical Education (ISTE) standards. The country's education sector received an 11% hike in the 2022-Budget. It set aside ₹1.04 lakh crore for education- an increase of around ₹11,000 crores. Battered by the two years long COVID-19 lockdown and the digital disruption, the government also announced plans to expand the One Class One TV Channel initiative under the PM e-Vidya scheme to 200 channels from the existing 20 for the education sector (L, 2022).

6.0 Recommendations

- a) Establishment of Quality Assurance Mechanism: Many online learning platforms offer multiple programmes on the same subjects with different levels of certifications, methodology and assessment parameters. So, the standard of programmes could dissent across completely different online learning platforms. Therefore, the establishment of quality assurance mechanisms and quality benchmarks for online learning programmes must be developed and offered by Higher Education Institutions (HEIs) in India keeping in view the rapid growth of the online learning platforms.
- b) For Accommodating Disabled Students: For the early education of children with impairments, establish tight collaboration with parents and caregivers. Assist parents

and caregivers in setting up equipment and supporting their children with disabilities' education programmes by providing assistance and distant help. To facilitate remote learning, create accessible and adaptive materials for students with disabilities. Create accessible instructional audio-visual resources to disseminate across a variety of platforms. Ensure that people with disabilities have access to the Internet for remote learning and that software is accessible to them, including through providing assistive devices and appropriate accommodations. Through remote learning, provide teachers with guidance, training, and assistance in the area of inclusive education.

- c) *Bifurcation of Teaching Hours:* The government and educational institutions should prepare to keep the educational activity going while maintaining social distance. By following COVID-19 criteria, 30-40% of students and teachers may attend schools/colleges in two shifts per day to carry on educational activities (Jena, 2020). When offering education outside of schools, provide clear instructions to education and school authorities on the breadth of their responsibility and the diversity of resources accessible.
- d) *Development of In-Demand Skills:* The changing global economic scenario has put many at risk of losing jobs. There is a need for new-age skills such as artificial intelligence, deep learning, data analytics, etc. that have gained prominence over time. To remain agile and relevant in the job market even after COVID-19, students are required to continuously upskill themselves with industry-ready courses. Students need to learn the right skills that help them stay resourceful in the long term.
- e) *Improving Health and Sanitation:* Educational institutions need to develop and implement stricter health and sanitation policies. However, when it comes to implementing such measures, schools will almost certainly have to make trade-offs between efficacy and feasibility. Physical infrastructure, scheduling and staffing, transportation and food service, and health and behavioural policies are all areas where each school system will need to examine its health and safety measures to meet its resources and capabilities. COVID-19 immunisation of all eligible students, teachers, staff, and household members is also one of the most important ways for schools to resume normal operations safely.

- f) Improving Nutrition Condition of Students: There is a need to expand MDM (Master Data Management) coverage to include secondary school students, as well as to extend the breakfast programme to this level. This will necessitate greater monies being allocated to the scheme in the future Union and State budgets. To improve nutrition quality, the government should develop new means to provide meals while schools are closed; Take Home Ration (THR) should be fortified with eggs, milk, nutrient-rich vegetables, fruits, and other foods.
- g) Reducing the Number of School Dropouts: The government should offer monetary (direct cash transfer) and non-monetary incentives (including textbooks, stationery, mobile phones, computers, data packages, rations, and so on) to all beneficiaries who have applied with immediate effect. More resources should be allocated to a survey aimed at detecting out-of-school children by the government. For the next five years, the budgetary provision for mainstreaming out-of-school children under SMSA (Salvage Mechanic Seaman Apprentice) needs to be significantly expanded and its overall budget needs to be increased substantially to compensate for the existing resource crunch in the scheme.
- h) Overcoming Impediments in Online Education: Hindrance in online education due to COVID-19 can be overcome in many ways. For instance, understanding the key features of the various educational online platforms, using appropriate teaching methods and technology, monitoring students' progress by providing personalised learning and rewarding positive student behaviour, engaging parents to facilitate online learning, designing interactive learning activities.

7.0 Conclusion

As we enter the COVID-19 recovery phase, it will be critical to reflect on the role of educational systems – and particularly vocational education – in fostering resilient societies. The global health crisis and the lockdown that followed have brought to the fore professions that have often been taken for granted, renewing our awareness of their value to society. This has helped restore a sense of esteem for those workers who have worked relentlessly during this time to keep economies afloat. The outlook is very uncertain; but, if anything, the

pandemic has exposed our vulnerability to crises and revealed how precarious and interdependent the economies we have built can be. Disruptions we have just witnessed are not limited to pandemics, but may also result from natural, political, economic and environmental disorders. COVID-19 has impacted immensely the education sector of India. Though it has created many challenges, various opportunities have also evolved. The Indian Government and different stakeholders of education have explored the possibility of Open and Distance learning (ODL) by adopting different digital technologies to cope with the present crisis of COVID-19. India is not fully equipped to make education reach all corners of the nation via digital platforms. The students who aren't privileged like the others will suffer due to the present choice of digital platforms. But universities and the government of India are relentlessly trying to come up with a solution to resolve this problem.

The priority should be to utilise digital technology to create an advantageous position for millions of young students in India. It is the need of the hour for the educational institutions to strengthen their knowledge and Information Technology infrastructure to be ready for facing COVID-19 like situations. While this crisis has deeply disruptive implications, including for education, it does not have predetermined outcomes. It will be the nature of our collective and systemic responses to these disruptions that will determine how we are affected by them. In this sense, the pandemic is also a call to renew the commitment to the Sustainable Development Goals. Ensuring that all young people have the opportunity to succeed at school and develop the knowledge, skills, attitudes and values that will allow them to contribute to society is at the heart of the global agenda and education's promise to our future society.

The current crisis has tested our ability to deal with large-scale disruptions. It is now up to us to build as its legacy a more resilient society. Even if the COVID-19 crisis stretches longer, there is an urgent need to take efforts on maximum utilisation of online platforms so that students not only complete their degree in this academic year but also get ready for the future digital-oriented environment. The concept of "work from home" has greater relevance in such a pandemic situation to reduce the spread of COVID-19. India should develop creative strategies to ensure that all children must have sustainable access to learning during pandemic COVID-19. The Indian policies must include various individuals from diverse backgrounds

including remote regions, marginalised and minority groups for effective delivery of education. As online practice is benefitting the students immensely, it should be continued after the lockdown.

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