
3. Impact of Covid-19 on Education in India

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Abstract:

This paper attempts to study the overall impact of COVID-19 on the various components of education in India. The authors first identify the various factors that promote the building up of a dynamic, relevant, and resilient education system and then use descriptive analysis to measure the impact of the pandemic on these causative factors. The study mainly focuses on measuring the impact on the education system in India and finds that across all factors, the COVID-19 pandemic has significantly impacted the status, dynamism, and resilience of the education system in India. It was also noticed that a significant effort was mobilized by the government to fight back and that the country has shown a promise of fast recovery.

Keywords:

COVID-19, Education, Dynamic, Relevant, Resilient

Introduction:

Education is an unquestionable privilege. It helps to form opinions and makes people less vulnerable to undesirable influences. An educated individual makes a responsible and dutiful citizen and also a compassionate social being. Thus, an educated society strives for excellence and creates an efficient society. However, to derive the benefits of education, an investment of both time and money becomes necessary. Individuals, being of different financial capabilities, sometimes find it difficult to invest the required resources. In a democratic setup, it therefore becomes the Government's responsibility to aid such investment. The pandemic which came in 2020 disrupted all such plans, both at the individual and administrative level. The education system which is the foundation structure for the demography of the economy was faced with a massive challenge of its continuity in the unprecedented time. The government had to fix this serious dilemma on how to arrest the spread of the coronavirus without compromising the education of the country. Due to the nationwide lockdown the government had closed down all the institutes of the country retarding all the learners of progressive education. Stopping education would risk a series of generations from advancing to a better future.

Accordingly, the government, scholars, leaders, bureaucrats and policy makers were demanded to take the optimal decisions to mitigate this grave problem of saving the nation from falling to the face of illiteracy and slow economic development. Consequently, the government leveraged this occasion to come up with e-learning programs and rethought the conventional learning methods with these viable solutions. The paper is divided into 6 sections. Section-1 talks about the literature review. Section-2 points to the state of public finance in the country. It highlights how the budget is increasing but still lower than the target figure. Section-3 talks about the impact of COVID-19 in on the student's foreign education.

Section-4 talks about the impact of loss of class hours and learning gaps created by the pandemic. Section-5 reveals the issue of learning gap among the instructors. Section-6 talks about alternative education during the pandemic.

Literature Review:

1. Banerji and Wadhwa (2021) report took the opportunity to meet the children of the village of Karnataka and evaluated how the school closure due to the Covid 19 epidemic affected learning. The learning gap widened due to the difference in income among students. 2. Baruah and Sahay (2022) found that the increase in school education budget is due to an increased allocation for the national education program, known as the Samagra Shiksha mission.

This includes funding for teacher training and adult education components. 3. Budget 2022 Increases Education Spending, Samagra Shiksha Scheme Key for School Reopenings (2022), this article found that the government increased the budget for a key education program, Samagra Shiksha.

The overall school education budget increased by 15.6%. The budget for Samagra Shiksha has grown by 20% but still lower than the government's plans. 4. Chaudhry (2022) found that more than seventy percent of Indian students who wish to study outside the country were willing to opt for hybrid programs to cut down on expenses in the post-pandemic scenario.

It found that the USA was the favorite destination for post-pandemic study. 5. Coronavirus effect: 61% of Indian students postpone plans to study abroad, finds survey (2020), many students decided to postpone their education abroad for a year. 6. Kalra (2021):

Online teaching resulted in new teaching methodologies. The teachers' role was redefined, activity-based learning was introduced, parents were involved in helping the teachers, holistic approach for the assessment were made, teachers were given training, etc. 7.

One of The Youngest Populations in the World – India's Most Valuable Asset - IndBiz | Economic Diplomacy Division (2021): With an average age of just 29, India has one of the youngest populations in the world. 8. Roy (2022):

The learning outcomes of younger children, particularly those in government schools, have been severely impacted. 9. Satpute (2022): The absolute amount of the education budget in several states was increased, but the proportion of the total national budget allocated to education is lower, even if the total national budget increased. 10. Teri (2022):

International universities did their best to make sure Indian students feel welcome and safe on campus. 11. World Bank Document (2022):

If illiteracy is high, it means that many people are not able to read or write, and this means that they may not be able to take part in global education goals or other sustainable development goals.

Public Finance in Education in India:

Education is perceived as a human right and in a democratic set-up, the government is expected to ensure access to basic education. This results in a rise in the basic literacy levels and hence a higher degree of development in the country. Public financing of education also helps to make education accessible to all income groups and removes inequality in opportunities. In the long run, it also helps to build a skilled and empowered workforce. Therein lies the importance of public financing of education for a developing nation like India.

Talking about the present situation of public financing of education in India, the education budget has been increased from Rs.93,224 crores in 2021-22 to Rs.1.04 lakhs crores in 2022-23. There is a 12% increase in the budget allocation. The rise in the budget allocation is due to the increase in the amount for Samagra Siksha, Digital India e-learning components, Supplementary Teaching and to promote Digital University.

The budget for 2022-23 is set to revive the pandemic-induced lockdown and the closure of the schools and universities. The budget is aimed to bridge the learning gaps, especially for the children living in the rural areas belonging to Scheduled Caste (SC) and Scheduled Tribe (ST) communities and other Economically Weaker Sections who have lost almost 2 years of formal classroom education. The education budget for 2022-23 is 3.1% of the total GDP of the country, although the NEP 2020 proposed that 6% of the GDP should be allocated for the education budget. The government's spending on education has resulted in over 10 lakh government schools of nearly 24.8 crore children being poorly educated.

The education budget is divided into two parts i.e., Department of School Education and Literacy and the Department of Higher Education. According to an article published recently by the Times of India, "37% of students in rural and 17% in urban areas doesn't study at all". This justifies that the government spending on school education is much more important than higher education spending.

Due to its contribution to the development at an early stage for an individual, it can increase incomes and can help to live a healthier life in the later stage. (World Bank) Over the years, the budget has been consistently increasing in both school education and higher education. The overall school education budget increased by 15.6% in 2022-2023 as compared to 2021-22. The government increased the budget for Samagra Shiksha, to Rs 37,383 crore in the 2022-23 budget, up by 20% from Rs 31,050 crore in 2021-22.

Despite the central funds for Samagra Shiksha, it is 64.5% which is lower than what was asked by the education ministry last year. Uttar Pradesh and Bihar allocated much lower shares at 13% and 15% respectively. However, this increase from 52% last year needs to be sustained in the coming years to overcome the challenges in the education sector in the coming years. ("Budget 2022 Increases Education Spending, Samagra Shiksha Scheme Key for School Reopenings") However, a further increase in public expenditure on education is desirable because even though the central and state spending on education has been increasing since 2014, the percentage of the total budget hovers around 10.5% for education (Figure 1) (Baruah and Sahay).

Year	Education Spending as a percentage of GDP (%)	Education Spending as a percentage of total government spending (%)	Government spending on Education (Central and State spending) (in INR trillion)
2014-15	2.8	10.8	3.54
2015-16	2.8	10.4	3.92
2016-17	2.8	10.2	4.35
2017-18	2.8	10.7	4.83
2018-19	3.1	10.5	5.81
2019-20	3.1	10.6	6.43

Figure 3.1; (Source: Economic Survey, 2019-20)

The other aspect to ponder is the impact of the recent COVID-19 pandemic on education financing. According to a survey, in the first year of the pandemic 14 out of 21 states reduced their education budget as a proportion of their total budgets (Figure 3.2).

Due to the growing need for health financing, the education budget was reduced that year although 8 out of 14 of these states had increased their total expenditure that year. In the second year of the pandemic 12 of these 21 states further reduced their allocation to education as compared to the previous year (Satpute).

Education spending as the proportion of state budgets:

State	Budget Estimate 2020-21 (%)	Revised Estimate 2020-21
Delhi	22.76	20.52
Maharashtra	15.02	16.83
Rajasthan	17.73	15.47

Figure 2; Source: Policy Tracker by National Coalition of Education Emergency

Therefore, it can be concluded that the government spending on education is increasing slowly and at a rate lower than the growth rate of the nation and is underspending concerning the investment proposed by NEP 2020. Although the state governments had reduced their spending during COVID-19, the central government has currently infused additional funds to recover that gap. Special attention is being given to government schools justified by the fact that students belonging to low-income group families cannot afford to send their children to private educational institutes.

Impact on Student's Foreign Education:

Each year, many Indian students go abroad for higher education. The reasons are various; flexibility and competitiveness of courses, enhanced employment prospects globally, and better research opportunities. Students from other countries come to India for education for similar reasons. During the current pandemic, this sector too suffered a slowdown. The educational institutes around the world had to be shut down during the multiple lockdowns and closure of the borders. According to a survey of 11,310 Indian students by the Quacquarelli Symonds (QS), which brings out the World University rankings every year, it was found that 61% of the Indian students who had planned to study abroad decided to lay off their studies by a year.

Out of these 49% of them planned to study MBA. 19% planned to study for master's and do their Ph.D. and 29% wanted to study at the undergraduate level. According to the survey, 48% did not wish to study online.

Only 17% were extremely interested or very interested in the online program. 82% of the students stated that due to classes being held virtually they expected a reduction in the tuition fee. Only 5% did not have a problem paying the same fees as they would have from an on-campus program.

Out of the ones who demanded a fee reduction, 24% expected to offer a nearly 50% reduction in tuition fees till the face-to-face classes commenced. 19% wanted a reduction of 40% college fee and 20% wanted universities to offer waivers of up to 30%. ("Coronavirus effect: 61% Indian students postpone plans to study abroad, finds survey") (Banchariya) During the lockdown as most of the offices were operating at under capacity level, getting the right documents and conducting entrance tests also became difficult.

Therefore, the universities had relaxed some of the requirements for GMAT, GRE, IELTS, TOEFL, and SAT. It was also found that the majority of the students had difficulties understanding the visa guidelines relating to foreign studies due to the fluctuations in the policy changes from time to time.

The USA, the favorite choice of the Indian students (Chaudhry) and the country with the second most Indian overseas students, saw a considerable decline of 13.2% from 2019 to 2021. The situation was repeated in New Zealand and Australia, two other popular study destinations for Indian students. Before the pandemic, Australia used to have a 20% share of the Indian students but after the pandemic, it has been decreased to 9% (Teri). However, post-COVID, the situation is back to normal.

International Indian Students in the USA

Year	International Students	% Change
2018-19	202,014	2.9
2019-20	193,124	-4.4
2020-21	167,582	-13.2

Figure 3.3; Source: opendoorsdata

India as a destination for the study was affected by the onset of the pandemic too. According to the data of the ministry of external affairs on the arrival of foreigners on a student visa in India, there was a 70% decrease in foreign student inflow to India due to the pandemic. However, post-pandemic there is a 14% increase in the same. This shows that there was a heavy impact of COVID on studying abroad.

Impact of Loss of Class hours & Learning gap in Students:

Although in the age of the internet, online education is picking up big time, the usefulness and importance of classroom interaction cannot be ignored. Classroom interaction is deemed to increase motivation, self-confidence, and self-esteem. It encourages peer assistance, welcomes curiosity, and motivates enthusiastic learning along with peers. An absence of this could create learning gaps. The COVID-19 lockdown created such learning gaps in students.

According to the Annual Status of Education Report (ASER) which covered 46,021 children aged between 3 to 16 years in 28 districts of Chhattisgarh in 2021, it was found that the learning gap was more apparent in the backward districts. The data suggested that the students in private schools were less impacted than those studying in government schools. For example, 70.7% of children in class 2 of government schools in the country could read the letters in 2014, it rose to 77.1% in 2016, dipped marginally in 2018 to 76.3%, and in 2021 went down to 57% (Roy). This education inequality was created when the weaker and economically backward students were unable to access digital learning resources and did not have adequate learning desirable at their age. This resulted in widening the gap between students from different income and regional groups (Banerji and Wadhwa). Again, during the pandemic, there was a shift from private schools to government schools as private education became unaffordable to families going through a loss of income. According to the ASER findings, the percentage of students aged between 6 and 14 years enrolled in government schools was 69.9% in 2018 but increased to 72.6% in 2020. Further, Primary education is deemed to be of high importance as it promotes the development of foundational skills like reading, counting, writing, etc; and is much less adaptive to the learning methods that were conventionally used during the lockdown period. Foundational skills are the building blocks for further learning and the overall development of a student. The younger students need to have a physical classroom form of education because they require better cognitive development.

According to the World Bank, children who lost months of school education may experience a lower income later in their lives. For students in higher education, online education created similar issues of impaired adaptability. Based on the facts presented above, it may be concluded that the loss of class interaction during the pandemic created substantial learning gaps across the academic community.

Adaptability Gap in Instructors:

According to the survey published in Sage Journals, teachers who provided online classes needed to invest in the technology that they may or may not possess consistent internet connectivity and a reliable power source. According to that survey, 60% of the teachers had poor connectivity or no internet connection at all. The teachers needed to have the burden of financial costs, especially living in the tier-II or tier-III cities and especially the rural areas where the salary of these teachers was low. Government school teachers were not fully equipped digitally in comparison with private schools. The majority of the schools provided online class training and their teachers and it helped them with online teaching materials and assignments. The teachers living in tier-II and tier-III rural areas compared to the teachers living in tier-III cities were found to have a digital skill gap. Teachers had to switch between online platforms like PowerPoint, Google classrooms, Zoom, Microsoft's teams, and several others. They needed to develop new curriculum plans, assessments, and learning materials. They faced a challenge and it was difficult for them to become efficient at using new technology in a very short period. According to the report, only 54% of the total 288 teachers have been trained to search a random situation. Only 84% of the teachers received support from schools and helped develop new classroom materials, out of these 72% were from private schools and 27% from the government schools.

According to the survey 15-25% of teachers had reported a lack of preparedness in conducting online education. 19% of the teachers only had sufficient financial resources. The teachers faced several issues while maintaining student engagement in the classes. The primary concern for a teacher was that they were monitored by the parents or the headmaster. The private school teachers were much more anxious than government teachers because they had less job security as compared to government school teachers. The problems faced at the senior level were different. But for senior students and large batches, it became a challenging task for the teacher to restrain the prohibited technological devices such as microphones, cameras, and so on. It was difficult to monitor the senior students in large batches, as some students would be sleeping or were not attending the class while being present from their devices. Some teachers were known to have been bullied by the students, sometimes even they were kicked out of the virtual classrooms and it was a difficult task to keep them in control. The survey discloses that teachers were having challenges with an online infrastructure of communication. The schools supported the teachers and invented new ways of teaching and designing the curriculum. The teachers faced several issues in the online platforms and therefore it was sometimes uncomfortable for the teacher to engage themselves in the classes. The teachers faced several issues in the online platforms and therefore it was sometimes uncomfortable for the teacher to engage themselves in the classes.

The teachers had problems switching from traditional classroom teaching to online teaching. The teachers must be trained in both forms of teaching.

Alternative Education During the Pandemic:

To support continuous learning, the government provided several portals for e-learning. The government made huge efforts to revive learning through collective efforts with NGOs, Khan Academy, and the Azim Premji Foundation. The education sector responded responsibly to provide easy access to learning during the school closures with variation among different states. Gujarat focused on distributing QR codes in the textbooks, Bihar and Uttar Pradesh focused on learning through TV channels, Assam distributed worksheets and mid-day meals to ensure the continuity of learning, Kerala focused on textbook distribution and education through WhatsApp groups, and Odisha used radio as online classes failed to reach all the students due to poor mobile connectivity. According to the survey, the most used channel of remote learning was WhatsApp.

Whatsapp was used by 47% of the students aged between 5 to 13 years. Radio learning was not effective as it was used by a very low percentage of the students, as the radio medium was neither interactive nor tailored to meet all the student needs. In March 2020 the government school teachers were asked to fight against the virus as frontline workers.

The government school teachers would be required to work at quarantine centers after their daily online routing of teaching. The teachers were required to distribute rations from the school to the people in neighboring communities. On top, salaries for government and private school teachers were not paid for several months.

According to the ASER 2020 survey, schoolchildren received school-related help from family members. It was found that mothers had a higher involvement than fathers with younger children. The father's impact on the children's education was positive and should be promoted further. As millions of children turned to online education, they were vulnerable and had to face cyberbullying. The nutrition was required by the students and for their safety of immunity during the COVID-19 outbreak, the state government provided dry rations such as rice and eggs to the students' homes through Anganwadis. There had been a focus to safeguard the well-being and protection of the children during the lockdown. It was expected that the leaders of Panchayat must play a crucial role in protecting the rights of the children in their communities and should reasonably protect them from child marriage and child trafficking.

The schools were reopened in a phased approach except for the contaminated zones. While it was reopening, distance learning was the preferred mode of teaching and learning. Attendance was not enforced and was dependent on the parents' consent. The schools needed to have fully sanitized, cleaned, and infected because the schools were used as quarantine centers. Schools were expected to have health and safety supplies such as thermometers, disinfectant soaps, and handwashing facilities.

The schools were expected to provide more priority to the well-being of the students, both physical and emotional support to the students. The teachers were concerned with the students from the poorest households as they were vulnerable to dropping more. Unfortunately, it was apparent that there were concerns that the teaching and learning requirements were not fulfilled as it was not matched with the expectations.

The role of the teacher was dynamic and had to reconstruct the whole syllabus not only to aim to complete the syllabus but was determined to make the curriculum more interesting and pleasing for the student. The teachers had to create questions so that they wouldn't be searchable on the internet which not only focused on keywords but the understanding of the concept of the students. The teachers adopted innovative methods to explain difficult concepts without the lab. For instance, the teacher started to find alternative modes of explaining the same concept through easily available things in the home. The student-teacher interaction became interesting when the teachers got interesting ways of giving assignments rather than doing the same thing on paper and pen. The online classes made the teacher spend more time planning a lecture than delivering it. The teacher missed explaining some topics while explaining with a whiteboard and colorful markers during the online classes, then the teacher would have to replace them with multimedia content and then the teacher would have used online worksheets and assignments as homework during the classes. Online education helps create and explore holistic approaches toward assessments as compared to pen and paper-based tests. The teachers were requested to use more tech tools for teaching assessment and research. It was expected from the teachers to increase and improve collaboration with the students in the online classrooms. Online learning brought the liberty to teachers from working from home at unscheduled school during class hours. (Kalra)

Conclusion:

The pandemic tested the education framework of the nation. The government made tough decisions by balancing both the pandemic and the education system. It was compelled to increase the budget by bringing new innovative e-learning programs to bridge the learning gaps and to compensate for the class hours among the unprivileged students. The government was partially successful in fulfilling its goals by failing to redistribute necessary digital infrastructures like low internet connectivity in the rural area and less distribution of tablets and mobile phones. India's abroad students' demand was greatly reduced due to the restrictions on the foreign borders, and it regained its default state when the lockdown loosened. The pandemic tested the resilience of the education system of the country. It can be concluded that the education was on the verge of failing as very poor students saw school dropouts and retardation of the learning because the digital infrastructure was not good enough. The teachers firstly were not comfortable in imparting digital education, because of a lack of training. The teachers shall be trained in digital teaching to prevent such future disasters. Due to demand for new learning methodologies, the government launched and supported several such edu-techs and schemes that promoted distant learning. Broadly, the pandemic was detrimental to the education of the students as it increased the gap between privileged and unprivileged and the government has put some effort to get the education back on track.

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