Reference Based Study On Impact Of Covid-19 On Education Systems

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Abstract: Online classes are not capable of substituting classroom lectures. The former is very seldom able to generate the interaction that is needed in a class. Moreover, the teachers' body language, which is a part and parcel of the classroom lectures and is imperative for their success, is also missing in online classes. The use of technology will not only lead to more discrimination, but also will create some practical problems. It will also lack the desired interaction in the class. Novel Coronavirus (COVID-19) pandemic has significantly disrupted every aspect of human life. As the COVID-19 spread across the globe, alarm bells are sounding in the education sector. The Covid-19 pandemic has forced schools, colleges, universities & institutions to shut down temporarily and causing havoc in the education system. According to UNESCO report more than 157 crore students across 191 countries severely impacted by closure of educational institutions due to coronavirus. The issue of the COVID-19 and its impact on higher education is an emergent focus of debate worldwide. Closing universities and cancelling classes have become a COVID-19 reality in many countries of the world, leading to enormous anxiety and uncertainty of an organization.

Key words: Online Classes; Lectures; Impact; Covid-19; Pandemic; Education Sectors; Globe; Institution; Schools; Students;

INTRODUCTION

The coronavirus SARS-CoV-2 causes a deadly disease, COVID-19 with a fatality rate between 2-3%. It has created havoc as it has engulfed the whole world, being declared a pandemic by the WHO. Lockdowns that have been imposed in almost countries to save the citizens from the lethal infection have taken a toll, shattering economies. The disease has not spared even the advanced European countries, let alone be backward African countries and the developing Asian countries. The first and foremost job in the hands of the government is not to save their people from the infection by imposing lockdown and social distancing only, but also to cope with the lockdown to save the economies. The Indian Government is not an exception. The Indian Economy was already passing through a recession and experts were saying that the economy was heading towards depression even before the advent of the corona virus. COVID-19 has dealt a severe blow on the economy. It will be difficult to come out of this situation and depression once the lockdown is over. Against the backdrop of such pandemic, it is obvious that the education sector will suffer in all the countries like many other sectors. The Indian education system has been badly affected by the entry of the disease and also because of social distancing measures that were taken to prevent the spread of the disease. The ultimate act on the part of the central government has been to impose a lockdown of the entire country.

IMPACT OF CORONA VIRUS ON EDUCATION : Coping up

Even before the lockdown was enforced in the 3rd week of March, 2020, the state government in their individual capacities declared the schools and colleges and other educations institutions closed for a certain period of time from the middle of March. The closure was extended for some more time and finally the lockdown was declared. Thus, the education system has been hampered for the last 2 months and half months above. This is about regular classes in the education institutions. Just before the full lockdown, international flights were banned from leaving and entering the country, therebyrestricting people from going abroad to attend scheduled international seminars, workshops and also from visiting foreign universities for taking and giving classes and lectures etc. This was followed by cancellation of the national and domestic flights also thus resulting into people not being able to visit the places for educational purpose even inside the country. Finally, with the lockdown, the train also stopped running and thus the scheduled seminars, etc had to be cancelled in all the stages, like, national, state and regional and even local. Not only have seminars been cancelled, even visiting educational institutes for other purposes had be postponed, for example, taking viva for thesis, projects etc. and for other administrative purposes. With the full lockdown being imposed in the country, the education sector initially came to a standstill . This is an unprecedented and unfamiliar situation, and

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nobody still knows when the situation will be normal. It is imperative that the lifting of lockdown should obviously not take place in one go, but gradually, as otherwise the very purpose of the imposition of lockdown will be defeated with the spreading of the disease again. It is also true that unless the social distancing measures are removed, bringing back normalcy will be difficult. It is known fact the educational institutions are most vulnerable for the spread of the disease due to the mass gathering in the classrooms. Therefore unless, the infection is totally eradicated from the states, it is difficult to bring back the students to the schools, colleges, universities and other educational Resuming institutions. normal classes classrooms therefore seems a distant dream at this time. Gradually the system is getting accustomed to the situation. Distance classes, using various online platforms, have been started in many institutions. It is, however, difficult to say at this moment, how far it has been successful, especially when one is situated in an urban area and has the advantages of teaching an elite class. As a teacher of one of the elite (and oldest) universities of the country, we have the advantages of teaching an elite subject predominantly to urban students, where all students have smartphones although all of them may have desktops and or/laptops. Even the few semi urban and/or rural students in my classes are used to having online chats on their smartphones. Since the hostels are closed now many students have gone back to their homes, some in rural areas where they can't connect, mainly due to poor internet connectivity in their hometowns. The course I teach are non-laboratory based, and are largely non-mathematical, so I am able to continue with online classes.

The situation is very different when one looks at rural colleges and universities. Many students in rural areas may not have access to smartphones or computers. Even if they do, the net connectivity may not be as high as in urban areas. In any case, many students of the most elite institutions, the IITs are not able to have access to online classes from their homes due to these reasons. Therefore, some if not all of the universities, and some of the colleges have started online classes. The same can be said about other higher educational institutions, be they governmental, governmental-aided or autonomous. Private institutions normally draw students from affluent urban classes, and hence do face problem in dealing with unprecedented situation . The school education systems portray a dismal picture. There are many kinds of schools in the country: government, government-aided, private schools run missionaries as well as those run by public and private trusts. There are also elite "public schools"

Proceedings of Cloud based International Workshop "Impact of Covid19 on various domains- systems" 25th July, 2020 Organized by sbytetechnologies.com and innumerable village level elementary school under Sarva Shiksha Abhiyan Scheme, the latter catering to the below-poverty-level section of society. A majority of children (by number) attend village elementary and primary schools. Even in the urban areas, many such primary schools give classes to the poorer sections, most slum children attend these schools. In addition to the economic divide and the rural-urban divide there is a language divide as well. Vernacular medium schools largely (though with exceptions) cater to the poor while English medium schools cater to other sections of the society. Here again comes the aspect of the digital divide, most poor students do not have access to smartphones, and even if they do, the net connectivity is poor, and content is often not available in vernacular languages. This gives rise to discrimination in access to education. Today many schools in urban areas are having online classes, while the majority of rural school do not. Very young children are not able to learn through online processes as they can neither handle computers nor mobile phones. In many households, there is no computer, and in many children are not allowed smartphones as well. Both these problems exist regardless of class. Therefore, the digital divide at the school level leads to a gap between the haves and have-nots. Examinations have either postponed or cancelled. Cancelling intermediate semester or class annual exams or Class XI board exams will only weaken the foundation of the students. While it is true that online examinations are not possible at this time given the existing infrastructure in the country, already cancelling the exams kills the impetus of learning. The authorities could have waited for the lockdown to end before announcing such a drastic decision.India is a vast country with many complexities. The economic divide, the rural-urban divide and the resulting digital divide all have played an important role. The overall response of the country to the pandemic has thus been very mixed in the education sector.

THE FUTURE

Though the coronavirus entered India in the month of January, it was not until March that the seriousness of the situation was felt. For one and a half months now the education system has been in doldrums. In the meantime, the severe economic effects of the lockdown have begun to be felt and there have been consequent social changes. No one knows at present, what the ultimate effect of this economic harshness, it will be once the lockdown is over. The threat looms large particularly over low-income families. Many students belonging to low income families may not be in a position to continue with their due to a loss of income,

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especially those in the informal and unorganized sectors. This may especially be true for science and other technical education. At the same time, guest teachers and adhoc or para teachers in private educational institutes may lose their jobs as well. So far not much political change has been seen as a result of pandemic. Social change may emerge due to people staying at homes day after day, forced to spend time within small families and in limited space. The strain induced by the lockdown could have long-term effects, but how this will affect the higher education system is hard to predict right now. There is some evidence that domestic violence has increased, and there may be some effects on students' education, especially if family's break-up as a result of the lockdown. In any case, the resulting economic changes are sure to affect the higher education system indirectly. The bigger concern, however, on everybody's mind is the effect of the disease on the employment. Recent graduates in India are fearing withdrawal of job offers from corporate because of the current situation . The centre for Monitoring Indian Economy's estimates on unemployment shot up from 8.4% in mid-March to 23% in early April and the urban unemployment rate to 30.9%. Needless to say, the pandemic has transformed the centuries old, chalk-talk teaching model to one driven by technology. This disruption in the delivery of education is pushing policymakers to figure out how to drive engagement at scale while ensuring inclusive e-learning solution and tackling the digital divide. A multi-pronged strategy is necessary to manage the crisis and build a resilient Indian education systems in the long term.

ROLE OF TECHNOLOGY

Technology out not to play a bigger role in teaching of economics in the post-corona period. It has already been mentioned how the digital divide plays an important role, therefore in order to reach all students, classroom teaching is the best option. This is especially true for laboratory-based subjects. While humanities related subjects may be taught online, the teaching online will not teach all students (Lab-based practical classes cannot be held online as it is not possible to set up labs at homes, but that is another story). Subject like economics has aspect of both humanities and science, requiring both lecturers as well as (computer-based) practical work. The practical part of the course is difficult to conduct online since all students may nor own computers and in addition, we need proprietary software etc. For course with mathematics it is difficult to give instruction online as well.Online classes are not capable of substituting classroom lectures. The former is very seldom able to generate the interaction that is

Proceedings of Cloud based International Workshop "Impact of Covid19 on various domains- systems" 25th July, 2020 Organized by sbytetechnologies.com needed in a class. Moreover, the teachers' body languages, which is a part and parcel of the classroom lectures and is imperative for their success, is also missing in online classes. The use of technology will not only lead to more discriminations, but also will create some practical problems. It will also lack the desired interaction in the class.

IMPACT OF ONLINE EDUCATION

Calcutta University is large, catering to more than 20,000 students each year. It also has around 150 undergraduate colleges under its purview. While it is difficult to gauge the impact of the online classes in the institution so early, students of all subjects do not have access to online connectivity, especially those staying in the rural areas. The practical classes in the lab-based subjects are also not being held online and mathematical papers are difficult to be instructed online. Hence, it can be said that the impact has not been very positive. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platform. Even before COVID-19, there was already high growth and adoption in education technology, with global edtech investment reaching US\$18.66 in 2019 and the overall market for online education projected to US\$350 Billion by 2025. Whether it is languages apps, virtual tutoring, conferencing tolls, or online learning software, there has been a significant surge in usage since COVID-19.

EFFECTS ON RESEARCH

Research has been affected in a negative way. While it is true that non-lab-based research can be carried on through the student's perseverance and the contact with the mentor through telephone calls or emails, but one-to-one correspondences, with face to face discussions has not substitute. In many cases, where secondary data are needed, the students cannot visit the sources like the institution itself, offices and libraries, as all data are not available online. Similarly, primary data collection has also stopped since visiting sources is forbidden, and hence research is severely hampered. Mentorship improves only when there are face-toface correspondences. In the lab-based subjects, research is totally stalled. Doctoral research has been hindered, both in primary and advanced stages. Similarly, M.Phil research has also slowed down. This is a cause for concern since M Phil is a time bound project. There is a negative effect on project work as well.

RESPONSE FROM EDUCATION SECTOR/SYSTEM DURING COVID-19

In response to significant demand, many online learning platforms are offering free access to their services, including platform like BYJU's, a Bangalore based educational technology and online tutoring firm founded in 2011, which is now the world's most highly value edtech company. Since announcing free live classes on its Think and Learn app, BYJU's has seen a 200% increase in the number of new students using its product, according to Mrinal Mohit, the company's Chief Operation Officer. Decent classroom, meanwhile has been sued extensively since mid-February after the Chinese government instructed a quarter of a billion full time students to resume their studies through online platforms. This resulted in the largest "Online movement" in the history of education with approximately 7,30,000 or 81% of K-12 students, attending classes via the Tecent K-12 Online School in Wuhan. Lark, a Singaporebased collaboration suite initially developed by ByteDance as an internal tool to meet its own exponential growth, began offering teachers and students unlimited video conferencing time, audiotranslation capabilities, real-time co editing of project work, and smart calendar scheduling, amongst other features. Alibaba's distance learning solution, DingTalk, to support large scale remote work, the platform tapped Alibaba's cloud to deploy more than 10,000 new cloud servers in just two hours last month -setting a new record for rapid capacity expansion, " according to the DingTalk CEO, Chen Hang."

CONCLUSION

It is clear that this pandemic has utterly disrupted an education system than many asserts was already losing its relevance. It is safe to say that the present pandemic will not only affect the economy adversely, but also it will also affect the education sector adversely in India. Already, two & half month is lost. No one is sure how long it will take for the education sector to come out of the abnormal situation prevailing in the country at present. Moreover, education system is especially vulnerable since mass gathering cannot be avoided in our classrooms. Online classes are no substitute for classroom lecture for a variety of reasons. The digital divide will only lead to discrimination and practical classed based on laboratories cannot be held online. Giving instruction for mathematical courses is also difficult online. The interaction between the teachers and the students is a crucial components of teaching and cannot be replicated in online classes. Research has been severely hampered due to the lockdown, and hence the sooner normalcy returns, the better.

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