THE RISE OF ONLINE LEARNING DUE TO COVID PANDEMIC

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ABSTRACT

In India, Education system at present is at a changeover stage. A stage where changes have taken place for good and more transformations in thoughts and processes are preferred. Education system in any nation today seeks a relook. Education for academic institution and students must cope up to online teaching aids still remains a big question in the emergency situation of COVID-19. COVID-19 enforced the academic Education universities across globe to cancel the traditional chalk and talk (in class face-to-face education) methodology and change to the online teaching/learning. The change originates the challenge of compassion of learning and new opportunities that the technology offers.

The Government has insisted to start the academic and non-academic activity through online platforms on all stages of education and Non- Educational sectors. A generic framework for conducting online classes is described that meets the special requirements of the unprivileged students. Some premeditated plans to overcome the challenges are recognized and suggested on the basis earlier studies.

Key words *: Online Learning, Covid Pandemic*

INTRODUCTION

The education feedbacks during the preliminary phase of COVID-19 focused on implementing remote learning modalities as an at the time response. These were intended to reach all students but were not always successful. In this pandemic era has occurred, the teaching learning process, academic and non-academic responses affected by this difficult time.

Lots of schools and higher Education institutions and millions and more than of students are affected by lockdown due to the COVID-19 pandemic as the first response from the educational sector was to completely close down its operations. Corona virus pandemic has triggered the significant change, facing many challenges in the higher education community globally. After about four months in the global crisis, we have started realizing that the COVID-19 is here to stay and we must need to find solutions to move on. This crisis can be looked upon as an opportunity to reconstruct our longstanding educational systems and establish better and updated practices in academia, suitable for the present generation of learners.

Further, some of the Schools and universities have decided to start the online classes and other activates to the students in a trial foundation in the urban areas. This sudden transition of teaching methods to online classes made students and faculties in a mystified mode. The ongoing online classes are now

turned out towards the question of learning quality. Institutions have tried many methodologies during the start of lockdown to continue the curricula through recorded classes, uploading in the social media or in the websites. Students who have proper access of internet may study, others it's a difficult task (Ary & Brune, 2011).

The other hand another method is live classes/online classes. Reaching students through live classes institutions must have uninterrupted high-speed internet, infrastructure, a software tool to reach the students and the comfort. Online education is not just oral presentation of the faculty on the computer/laptop/mobile phone or it's not just listening at the other end by a student. Online teaching methodology imitated many challenges due to inexperience in conducting/attending live classes by faculty and students and lack of early preparation or support from educational technological teams. There may be many advantages and disadvantages of online classes for both faculties and students. For teachers, online classes permitted new method of teaching with access of advanced tools and technology involved in it and can reach to many students. Contrary, student can acquire knowledge of using different online tools and methods, pay much focus to recorded/live conversations of world class professionals, listen and watch classes many times and working at their own promptness. Notability to have a face-to-face connect with students and facilitate free conversations, discussions, and mentoring, lack of online teaching experience consumes more time and practice, technological difficulties with high speed internet access and getting used to learning and being evaluated online are identified as main problem.

The study on Education degree courses during lockdown period of the COVID Pandemic situation in India, decision has taken to conduct classes through online mode. Education starting from Bachelor of Arts, commerce, science and all technical education has started the online classes to their students using online tool. The aim of the study is to investigate/identify the knowledge, practice and utilization of online courses and the quality of understanding amongstthe students and faculties during lockdown period of the COVID-19 pandemic situation in India. The study also analyses the quality and outreach of the online classes with various stake holders of different Education streams through online Questionnaire based survey. In addition, suggestions and recommendations are high-lightened to impart better teaching and learning experience viz. online mode.

Literature Review

Raheem and Khan (2020)[8] studied the role of E-Learning during COVID-19 period. Main objective of the study was to investigate the role of e-learning in English language teaching and learning in COVID-19 crisis. E-Learning had a positive effect on student's English language learning. E-Learning increased student's knowledge about English language. In COVID-19 period E-Learning used as the most effective way of teaching and learning with the help of different applications. Teaching learning materials were available for the students through different online modes.

Shete et al. (2020)[11] conducted a study on the perception of MBBS students regarding E-Learning during COVID-19 lockdown. The objective of the study was to find out the perception of students regarding e-learning during COVID-19 pandemic period. The findings of the study revealed that majority of sixty two percent students agreed to use both face to face and E-Learning. Face to face learning was preferred by thirty one percent students and E-Learning was preferred by seven percent students. 30 Blended learning was preferred by the learners. Number of students used mobile phones was greater than the number of students used laptops.

Unger and Meiran (2020)[14] studied attitude of students towards online learning during the COVID-19 period. Researcher were to study perception of students towards online learning, misinformation in media, knowledge about disease and level of preparedness during COVID period. Findings of the study revealed that majority of the students showed that online learning was not same with the offline learning. Majority of the students agreed that preventive measures were based on science and medical knowledge.

Souvik sengupta (2022)[12] The undergraduate and postgraduate studies of colleges and universities in India have been affected badly amidst the lockdowns for COVID-19 pandemic. The Government has

insisted to start the academic movements through online platforms. A general framework for conducting online classes is described that meets the special requirements of the unprivileged students. Some strategic plans to overcome the challenges are identified and suggested. A technical solution for implementation of time-bound assessment module is also proposed.

Ambika Selvaraj , Vishnu Radhin , Nithin Ka , Noel Benson , and Arun Jo Mathew (2021)[2] This study aimed to understand how online classes had fared for the teachers and students in India. The questionnaires were circulated by machine as google forms. The responses were received from the teachers (school teachers and college professors considering all courses) and learners (school and college students considering all courses) of various educational institutions across the country. The data was compiled and the results were discussed in two ways, firstly, the perspectives of teaching versus the learning group and secondly, school versus college groups on online versus regular classes.

This data indicated that they have used at least one teaching method listed in the questionnaire for covering the theoretical component of the syllabus. The use of online teaching tools in figure 1and figure 2.
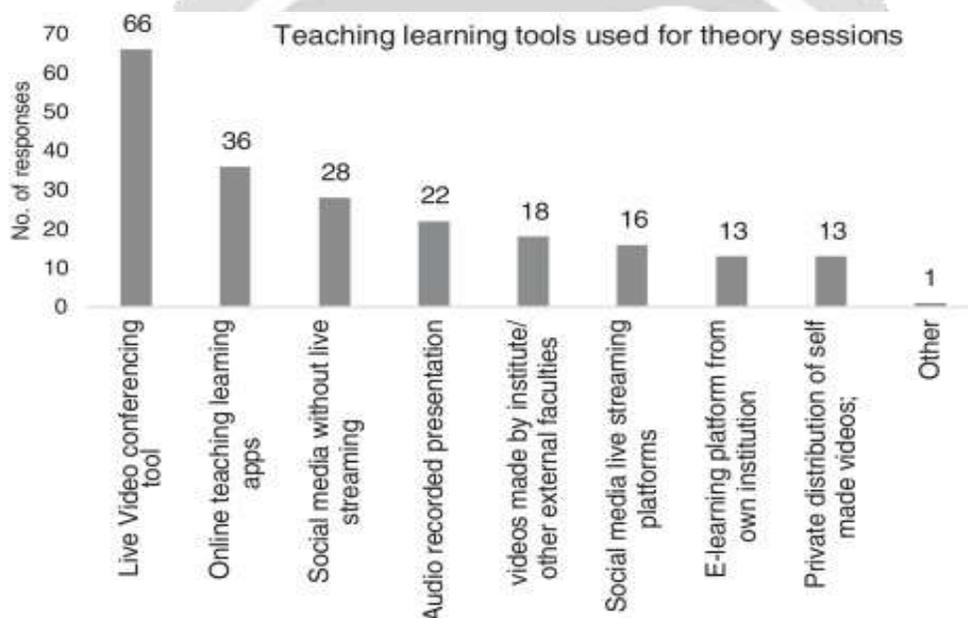

Figure 1. Graph showing the popularity of various online teaching tools for THEORY classes.
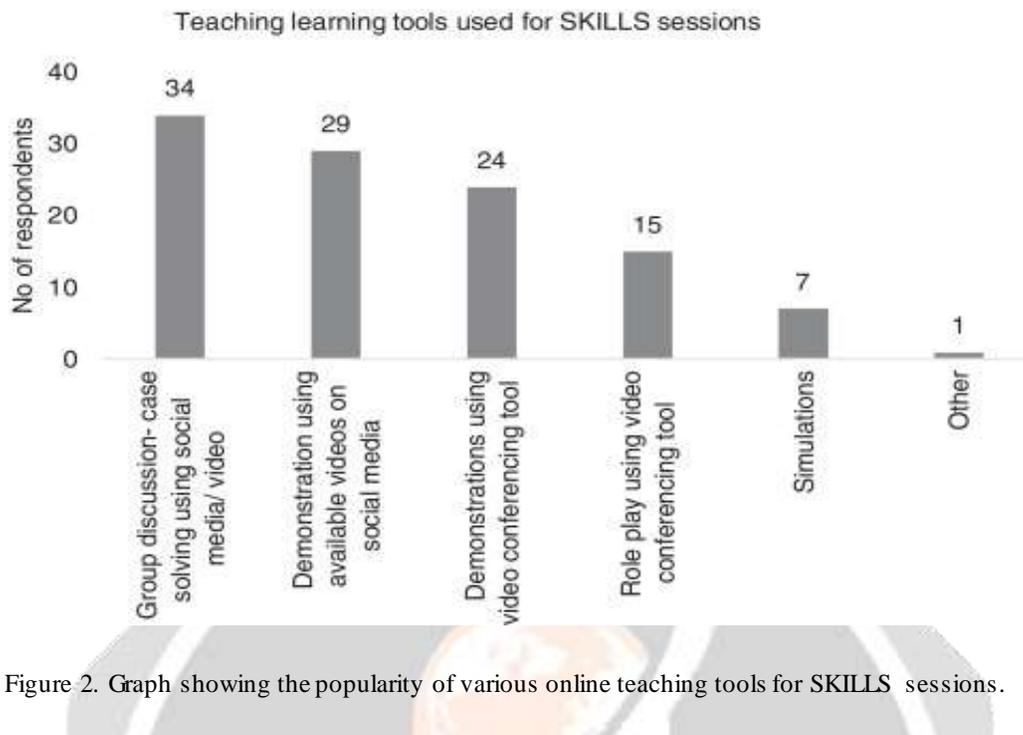
Figure 2. Graph showing the popularity of various online teaching tools for SKILLS sessions.

Following is the list of some of the digital initiatives of MHRD & UGC along with their access links for school students as well as Undergraduate level and Post graduate level education:

1. SWAYAM online courses: provides access to best teaching learning resources which were earlier delivered on the SWAYAM Platform may be now viewed by any learner free of cost without any registration. Students/learners who registered on SWAYAM (swayam.gov.in) in the January 2020 semester can continue their learning as usual. Link https://storage.googleapis.com/uniquecourses/online.html

2. UG/PG MOOCs: hosts learning material of the SWAYAM UG and PG (Non- Technology) Link- https://ugcmoocs.inflibnet.ac.in/ugcmoocs/moocs_courses.php.

3. e-PG Pathshala: hosts high quality, curriculum-based, interactive e-content containing 23,000 modules (e-text and video) in 70 Post Graduate disciplines of social sciences, arts, fine arts and humanities, natural & mathematical sciences. Link- epgp.inflibnet.ac.in

4. e-Content courseware in UG subjects: e-content courseware in 87 Undergraduate courses with about 24,110 e-content modules is available on the CEC website at http://cec.nic.in/.

5. SWAYAMPRABHA: is a group of 32 DTH channels providing high quality educational curriculum based course contents covering diverse disciplines such as arts, science, commerce, performing arts, social sciences and humanities subjects, engineering, technology, law, medicine, agriculture etc to all teachers, students and citizens across the country fascinated in lifetime learning. These channels are free to air and can also be accessed through your cable operator. The telecasted videos/lectures are also as archived videos on the Swayamprabha portal. Link- https://www.swayamprabha.gov.in/

6. CEC-UGC YouTube channel: provides access to unlimited educational curriculum based lectures completely free. Link- http://www.youtube.com/user/cecedusat

7. National Digital Library: is a digital repository of a vast amount of academic content in different formats and provides interface support for leading Indian languages for all academic levels including researchers and life-long learners, all disciplines, all popular form of access devices and differently-abled learners. Link- https://ndl.iitkgp.ac.in/

8. Shodhganga: is a digital storage area platform of 2,60,000 Indian Electronic Theses and Dissertations for research students to deposit their Ph.D. theses and make it to the entire scholarly community in open access. Link https://shodhganaa.inflibnet.ac.in

9. Vidwan: is a database of experts which provides information about experts to peers, prospective collaborators, funding agencies policy makers and research scholar in the country. "It is hoped, that

these ICT initiatives, which cover a broad variety of subjects and courses and have been prepared by experts, will make available an excellent learning experience to all. Link- https://vidwan.inflibnet.ac.in/

Free online platforms that maintain live-video communication

Leraners used online are numerous live-video communication platforms are available in web, but some of the free online platforms are as listed below which can be used

Zoom – Cloud raised area for video and audio conferencing, collaboration, chat and webinars.

Google Meet – Video calls integrated with other Google's G-Suite tools. Video meeting recordings, Screen sharing, Join calls using Google Calendar

Skype – Video and audio calls with talk, chat and collaboration features.

Facebook Live- is a great fit for businesses, influencers, or individuals who are looking to broadcast demos, videos, or showcase their company culture while streaming live, followers on Facebook can comment and chat live, schedule videos ahead of time to gain excitement.

YouTube Live- is a platform for demonstrating a product with live interaction, hosting an educational session to teach audience with screen sharing or using a whiteboard, having features with Location tags and advanced scheduling.

Tteamwork features

➢ Free Conference is superlative for smaller teams or meetings, feature include screen sharing, Document sharing, Text sharing etc.
➢ Dingtalk – Communication display place that supports video conferencing, task and calendar management, attendance tracking and instant messaging.
➢ Lark – Collaboration suite of interconnected tools, including chat, calendar, creation and cloud storage, in Japanese, Korean, Italian and English.
➢ Teams – Chat, meet, call and collaboration features integrated with Microsoft Office software.
➢ True Conf Online- HD video with Collaboration tools (screen sharing, remote desktop control, recorded calls, file transfer and shared virtual whiteboard).
➢ Slack Video Calls- is good for teams looking for a extra video calling solution for small teams; features include individual calls and messenger services.
➢ Life-size Go- No borders on meeting length, number one for small group conversations.

Positive impact of COVID-19 on education Though the outbreak of COVID-19 has created many negative impacts on education, educational institutions of India have accepted the challenges and trying their best to provide seamless support services to the students during the pandemic. Indian education system got the opportunity for transformation from traditional system to a new era. The following points may be considered as the positive impacts.

1. Move towards Blended Learning: COVID-19 has accelerated adoption of digital technologies to deliver education. Educational institutions moved towards blended mode of learning. It encouraged all teachers and students to become more technology savvy. New ways of delivery and assessments of learning opened immense opportunities for a major transformation in the area of curriculum development and pedagogy. It also gives access to large pools of learners at a time.
2. Rise in use of Learning Management Systems: Use of learning management systems by educational institutions became a great demand. It opened a great opportunity for the companies those have been developing and strengthening learning management systems for use educational institutions (Misra, 2020).
3. Enhance the use of soft copy of learning material: In lockdown situation students were not able to collect the hard copies of study materials and hence most of the students used of soft copies materials for reference.
4. Improvement in collaborative work- There is a new opportunity where collaborative teaching and learning can take on new forms. Collaborations can also happen among faculty/teachers across the world to benefit from each other (Misra, 2020).
5. Rise in online meetings- The pandemic has created a massive rise in teleconferencing, virtual meetings, webinars and e-conferencing opportunities
6. Enhanced Digital Literacy: The pandemic situation induced people to learn and use digital technology and resulted in increasing the digital literacy.

7. Improved the use of electronic media for sharing information: Learning materials are shared among the students easily and the related queries are resolved through e-mail, SMS, phone calls and using different social Medias like WhatsApp or Facebook.
8. World wide exposure: Educators and learners are getting opportunities to interact with peers from around the world. Learners adapted to an international community.
9. Better time management: Students are able to manage their time more efficiently in online education during pandemics.
10. Demand for Open and Distance Learning (ODL): During the pandemic situation most of the students preferred ODL mode as it encourages self-learning providing opportunities to learn from diverse resources and customized learning as per their needs.

Negative impact of COVID-19 on education

Education sector has suffered a lot due to the outbreak of COVID-19. It has created many negative impacts on education and some of them are as pointed below:

✓ Educational activity hampered: Classes have been suspended and exams at different levels postponed. Different boards have already postponed the annual examinations and entrance tests. Admission process got delayed. Due to continuity in lockdown, student suffered a loss of nearly 3 months of the full academic year of 2020-21 which is going to further deteriorate the situation of continuity in education and the as students would face much difficulty in resuming schooling again after a huge gap.
✓ Impact on employment: Most of the recruitment got postponed due to COVID-19 Placements for students may also be affected with companies delaying the on board of students. Unemployment rate is expected to be increased due to this pandemic. In India, there is no recruitment in Govt. sector and fresh graduates fear withdrawal of their job offers from private sectors 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% (Educationasia.in). When the unemployment increases then the education gradually decreases as people struggle for food rather than education.
✓ Unprepared teachers/students for online education- Not all teachers/students are good at it or at least not all of them were ready for this sudden transition from face to face learning to online learning. Most of the teachers are just conducting lectures on video platforms such as Zoom, Google meet etc. which may not be real online learning without any dedicated online learning platform.
✓ Reduced global employment opportunity- Some may lose their jobs from other countries and the pass out students may not get their job outside India due to restrictions caused by COVID-19. Many Indians might have returned home after losing their jobs overseas due to COVID-19. Hence, the fresh students who are likely to enter the job market shortly may face difficulty in getting suitable employment. Many students who have already got jobs through campus interviews may not be able to join their jobs due to lockdown. The Indians who have been doing their jobs abroad may lose their jobs. Recent graduates in India are of also fearing for withdrawal of job offers from corporate sectors because of movement restriction in the current pandemic situation.
✓ Increased responsibility of parents to educate their wards: Some educated parents are able to guide but some may not have the adequate level of education needed to teach children in the house.
✓ Loss of nutrition due to school closure: Mid day meals is a school meal programme of the Government of India which is designed to provide better the nutritional food to school-age children nationwide. The closure of schools has serious implications on the daily nutrition of students as the mid-day meal schemes have temporarily been shut. Various studies have pointed out that mid-day meals are also an important contributing factor for increased enrolment in the schools.
✓ Access to digital world: As many students have limited or no internet access and many students may not be able to afford computer, laptop or supporting mobile phones in their homes, online teaching-learning may create a digital divide among students. The lockdown has hit the poor students very hard in India as most of them are unable to explore online learning according to various reports. Thus the online teaching-learning method during pandemic COVID-19 may enhance the gap between rich/poor and urban/rural.
✓ Access to global education: The pandemic has significantly disrupted the higher education sector. A large number of Indian students who are enrolled in many Universities abroad, especially in worst

affected countries are now leaving those countries and if the situation persists, in the long run, a there will be a significant decline in the demand for international higher education.

✓ Payment of Schools, Colleges fee got delayed: During this lockdown most of the parents will be facing the unemployment situation so they may not be able to pay the fee for that particular time periods which may affect the private institutes.

✓ 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.

✓ Immediate measures are required to lessen the effects of the pandemic on job offers, internship programs, and research projects.

✓ Many online learning platforms offer multiple programmes on the same subjects with different levels of certifications, methodology and assessment parameters. So, the quality of programmes may differ across different online learning platforms. Therefore, establishment of quality assurance mechanisms and quality benchmark for online learning programmes must be developed and offered by Higher Education Institutions (HEIs) in India keeping in view of rapid growth of the online learning platforms.

✓ Across the globe, Indian traditional knowledge is well known for its scientific innovations, values and benefits to develop sustainable technologies and medicines and this knowledge systems in different fields should be integrated with a present-day mainstream higher education system.

✓ Govt and educational institutes should plan to continue the educational activities maintaining social distancing. 30-40% students and teachers may attend schools/colleges in two shifts per day to carry on educational activities by obeying guidelines for COVID-19.

✓ At current times, access to technology and internet is an urgent requirement. So, the digital capabilities and the required infrastructure must reach to the remotest and poorest communities to facilitate the students to continue their education during the pandemics. There is a need to deploy public funds to fix the internet gap and ensure that students continue to learn digitally. The state governments/private organizations should come up with ideas to address this issue of digital education.

✓ Some significant issues associated with distance learning strategies like the availability and access to digital devices with internet connectivity, the need for safe learning spaces, creating capabilities for teachers, families and students to operate and navigate digital devices, and engaging lesson plans for disabled students and other marginalized groups should be addressed by Govt. and the stakeholders.

Conclusion

COVID-19 has impacted immensely to the education sector of India. Though it has created many challenges, various opportunities are also evolved. The Indian Govt. and different stakeholders of education have explored the possibility of Open and Distance learning (ODL) by adopting different digital technologies to cope up 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 utilize digital technology to create an advantageous position for millions of young students I n India. It is 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.

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 to get ready for the future digital oriented environment. The concept of "work from home" has greater relevance in such pandemic situation to reduce 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. Further detailed statistical study may be undertaken to explore the impact of COVID-19 on education system of Indi Positive impact of COVID-19 on education

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- ✓ Enhance the use of soft copy of learning material: In lockdown situation students were not able to collect the hard copies of study materials and hence most of the students used of soft copies materials for reference.
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- ✓ Enhanced Digital Literacy: The pandemic situation induced people to learn and use digital technology and resulted in increasing the digital literacy.
- ✓ Improved the use of electronic media for sharing information: Learning materials are shared among the students easily and the related queries are resolved through e-mail, SMS, phone calls and using different social Medias like WhatsApp or Facebook.
- ✓ World wide exposure: Educators and learners are getting opportunities to interact with peers from around the world. Learners adapted to an international community.
- ✓ Better time management: Students are able to manage their time more efficiently in online education during pandemics.
- ✓ Demand for Open and Distance Learning (ODL): During the pandemic situation most of the students preferred ODL mode as it encourages self-learning providing opportunities to learn from diverse resources and customized learning as per their needs.

Negative impact of COVID-19 on education

Education sector has suffered a lot due to the outbreak of COVID-19. It has created many negative impacts on education and some of them are as pointed below:

1.Educational activity hampered: Classes have been suspended and exams at different levels postponed. Different boards have already postponed the annual examinations and entrance tests. Admission process got delayed. Due to continuity in lockdown, student suffered a loss of nearly 3 months of the full academic year of 2020-21 which is going to further deteriorate the situation of continuity in education and the as students would face much difficulty in resuming schooling again after a huge gap.

- ✓ Impact on employment: Most of the recruitment got postponed due to COVID-19 Placements for students may also be affected with companies delaying the on board of students. Unemployment rate is expected to be increased due to this pandemic. In India, there is no recruitment in Govt. sector and fresh graduates fear withdrawal of their job offers from private sectors 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% (Educationasia.in). When the unemployment increases then the education gradually decreases as people struggle for food rather than education.
- ✓ Unprepared teachers/students for online education- Not all teachers/students are good at it or at least not all of them were ready for this sudden transition from face to face learning to online learning. Most of

the teachers are just conducting lectures on video platforms such as Zoom, Google meet etc. which may not be real online learning without any dedicated online learning platform.

4. Reduced global employment opportunity- Some may lose their jobs from other countries and the pass out students may not get their job outside India due to restrictions caused by COVID-19. Many Indians might have returned home after losing their jobs overseas due to COVID-19. Hence, the fresh students who are likely to enter the job market shortly may face difficulty in getting suitable employment. Many students who have already got jobs through campus interviews may not be able to join their jobs due to lockdown. The Indians who have been doing their jobs abroad may lose their jobs. Recent graduates in India are of also fearing for withdrawal of job offers from corporate sectors because of movement restriction in the current pandemic situation.

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✓ The closure of schools has serious implications on the daily nutrition of students as the mid-day meal schemes have temporarily been shut. Various studies have pointed out that mid-day meals are also an important contributing factor for increased enrolment in the schools

✓ Access to digital world: As many students have limited or no internet access and many students may not be able to afford computer, laptop or supporting mobile phones in their homes, online teaching-learning may create a digital divide among students. The lockdown has hit the poor students very hard in India as most of them are unable to explore online learning according to various reports. Thus the online teaching-learning method during pandemic COVID-19 may enhance the gap between rich/poor and urban/rural.

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✓ Across the globe, Indian traditional knowledge is well known for its scientific innovations, values and benefits to develop sustainable technologies and medicines and this knowledge systems in different fields should be integrated with a present-day mainstream higher education system.

✓ Govt and educational institutes should plan to continue the educational activities maintaining social distancing. 30-40% students and teachers may attend schools/colleges in two shifts per day to carry on educational activities by obeying guidelines for COVID-19.

✓ At current times, access to technology and internet is an urgent requirement. So, the digital capabilities and the required infrastructure must reach to the remotest and poorest communities to facilitate the students to continue their education during the pandemics. There is a need to deploy public funds to fix the internet gap and ensure that students continue to learn digitally. The state governments/private organisations should come up with ideas to address this issue of digital education.

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teachers, families and students to operate and navigate digital devices, and engaging lesson plans for disabled students and other marginalised groups should be addressed by Govt. and the stakeholders.

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✓ Impact on employment: Most of the recruitment got postponed due to COVID-19 Placements for students may also be affected with companies delaying the on board of students. Unemployment rate is expected to be increased due to this pandemic. In India, there is no recruitment in Govt. sector and fresh graduates fear withdrawal of their job offers from private sectors 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% (Educationasia.in). When the unemployment increases then the education gradually decreases as people struggle for food rather than education.

✓ Unprepared teachers/students for online education- Not all teachers/students are good at it or at least not all of them were ready for this sudden transition from face to face learning to online learning. Most of the teachers are just conducting lectures on video platforms such as Zoom, Google meet etc. which may not be real online learning without any dedicated online learning platform.

✓ Reduced global employment opportunity- Some may lose their jobs from other countries and the pass out students may not get their job outside India due to restrictions caused by COVID-19. Many Indians might have returned home after losing their jobs overseas due to COVID-19. Hence, the fresh students who are likely to enter the job market shortly may face difficulty in getting suitable employment. Many students who have already got jobs through campus interviews may not be able to join their jobs due to lockdown.

✓ The Indians who have been doing their jobs abroad may lose their jobs. Recent graduates in India are of also fearing for withdrawal of job offers from corporate sectors because of movement restriction in the current pandemic situation

✓ Increased responsibility of parents to educate their wards: Some educated parents are able to guide but some may not have the adequate level of education needed to teach children in the house.

✓ Loss of nutrition due to school closure: Mid day meals is a school meal programme of the Government of India which is designed to provide better the nutritional food to school-age children nationwide. The closure of schools has serious implications on the daily nutrition of students as the mid-day meal schemes have temporarily been shut. Various studies have pointed out that mid-day meals are also an important contributing factor for increased enrolment in the schools

✓ Access to digital world: As many students have limited or no internet access and many students may not be able to afford computer, laptop or supporting mobile phones in their homes, online teaching-learning may create a digital divide among students. The lockdown has hit the poor students very hard in India as most of them are unable to explore online learning according to various reports. Thus the online teaching-learning method during pandemic COVID-19 may enhance the gap between rich/poor and urban/rural.

✓ Access to global education: The pandemic has significantly disrupted the higher education sector. A large number of Indian students who are enrolled in many Universities abroad, especially in worst affected countries are now leaving those countries and if the situation persists, in the long run, a there will be a significant decline in the demand for international higher education.

✓ Payment of Schools, Colleges fee got delayed: During this lockdown most of the parents will be facing the unemployment situation so they may not be able to pay the fee for that particular time periods which may affect the private institutes.

Suggestions

- 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.

- Immediate measures are required to lessen the effects of the pandemic on job offers, internship programs, and research projects.

- Many online learning platforms offer multiple programmes on the same subjects with different levels of certifications, methodology and assessment parameters. So, the quality of programmes may differ across different online learning platforms. Therefore, establishment of quality assurance mechanisms and quality benchmark for online learning programmes must be developed and offered by Higher Education Institutions (HEIs) in India keeping in view of rapid growth of the online learning platforms.

- Across the globe, Indian traditional knowledge is well known for its scientific innovations, values and benefits to develop sustainable technologies and medicines and this knowledge systems in different fields should be integrated with a present-day mainstream higher education system.

- Govt and educational institutes should plan to continue the educational activities maintaining social distancing. 30-40% students and teachers may attend schools/colleges in two shifts per day to carry on educational activities by obeying guidelines for COVID-19.

- At current times, access to technology and internet is an urgent requirement. So, the digital capabilities and the required infrastructure must reach to the remotest and poorest communities to facilitate the students to continue their education during the pandemics. There is a need to deploy public funds to fix the internet gap and ensure that students continue to learn digitally. The state governments/private organisations should come up with ideas to address this issue of digital education.

- Some significant issues associated with distance learning strategies like the availability and access to digital devices with internet connectivity, the need for safe learning spaces, creating capabilities for teachers, families and students to operate and navigate digital devices, and engaging lesson plans for disabled students and other marginalised groups should be addressed by Govt. and the stakeholders.

Conclusion

COVID-19 has impacted immensely to the education sector of India. Though it has created many challenges, various opportunities are also evolved. The Indian Govt. and different stakeholders of education have explored the possibility of Open and Distance learning (ODL) by adopting different digital technologies to cope up 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 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.

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 to get ready for the future digital oriented environment. The concept of "work from home" has greater relevance in such pandemic situation to reduce 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. Further detailed statistical study may be undertaken to explore the impact of COVID-19 on education system of India.

- ✓ Move towards Blended Learning: COVID-19 has accelerated adoption of digital technologies to deliver education. Educational institutions moved towards blended mode of learning. It encouraged all teachers and students to become more technology savvy. New ways of delivery and assessments of learning opened immense opportunities for a major transformation in the area of curriculum development and pedagogy. It also gives access to large pools of learners at a time.
- ✓ Rise in use of Learning Management Systems: Use of learning management systems by educational institutions became a great demand. It opened a great opportunity for the companies those have been developing and strengthening learning management systems for use educational institutions. Move towards Blended Learning: COVID-19 has accelerated adoption of digtal technologies to deliver education.
- ✓ Educational institutions moved towards blended mode of learning. It encouraged all teachers and students to become more technology savvy. New ways of delivery and assessments of learning opened immense opportunities for a major transformation in the area of curriculum development and pedagogy. It also gives access to large pools of learners at a time.

Positive Impact of Online Leaning

Though the outbreak of COVID-19 has created many negative impacts on education, educational institutions of India have accepted the challenges and annoying their best to provide seamless support services to the students during the pandemic. Indian education system got the opportunity for transformation from traditional system to a new era. The following points may be considered as the positive impacts.

Importance of Blended Learning: COVID-19 has accelerated adoption of digital technologies to provide that education. Educational institutions moved towards blended mode of learning. It encouraged all teachers and students to become more technology savvy. New ways of delivery and assessments of leaning opened immense opportunities for a major change in the area of curriculum development and pedagogy. It also gives access to large pools of learners at a time.

Rise in application of Learning Management Systems: Application of learning management systems by educational institutions became a great demand. It opened a great space for the companies those have been developing and strengthening learning management systems for use educational institutions.

Facility the use of soft copy of learning material: In lockdown situation students were not able to collect the hard copies of study materials and hence most of the students used of soft copies materials for reference.

Improvement in collaborative functioning- There is a new opportunity where collaborative teaching and learning can take on new forms. Collaborations can also happen among faculty/teachers across the world to benefit from each other.

Improvement in online Meetings- The pandemic has created a very big rise in teleconferencing, virtual meetings, webinars and e-conferencing opportunities

Improvement in Digital Literacy: The pandemic situation induced people to learn and use digital technology and resulted in increasing the digital literacy and behavior.

Use of electronic media for sharing information: Learning materials are shared among the students easily and the related queries are resolved through e-mail, SMS, phone calls and using different social Medias like WhatsApp or Facebook,Telegram,Zoom and video confrenssing .

Exposure at International level: Educators and learners are getting opportunities to interact with peers from around the world at different places. Learners adapted to an international community for leraning.

Trauma on Education

Education field has faced a lot due to the outbreak of COVID-19. It has formed many unconstructive impacts on education and some of them are as pointed below:

Educational activity confided: Classes have been on the edge and exams at different levels postponed. Different boards have already postponed the annual examinations and entrance tests.

Late Admission process . Due to faithfulness in lockdown, student suffered a loss of nearly three months of the full academic year of 2020-21 which is going to additional go down the situation of continuity in education and the as students would appearance much difficulty in resuming schooling again after a huge gap.

Increased dutyies of parents to educate their fields: Some educated parents are able to guide but some may not have the enough level of education needed to teach children in the house.

Access to online world: The lockdown has hit the poor students very hard in India as most of them are not capable to explore online learning according to various reports. Thus the online teaching-learning method during pandemic COVID-19 may enhance the gap between rich/poor and urban/rural.

Allowance to global education: The pandemic has significantly disrupted the higher education sector. A large number of Indian students who are enrolled in many Universities abroad, in particular in worst affected countries are now leaving those countries and if the situation persists, in the long run, a there will be a considerable decline in the demand for international higher education.

Payment of Schools, Colleges fee got disturbed : During this lockdown most of the parents will be in front of the being without a job situation so they may not be able to pay the fee for that particular time periods which may affect the private institutes.

Government and educational institutes should plan to continue the educational activities maintaining social distancing. 30-40% students and teachers may attend schools/colleges in two shifts per day to carry on educational activities by obeying guidelines for COVID-19. At current times, access to technology and internet is an urgent requirement. So, the digital capabilities and the required infrastructure must reach to the remotest and poorest communities to make possible the students to continue their education during the pandemics. There is a need to arrange public funds to fix the internet gap and ensure that students continue to learn digitally. The state governments/private organizations should come up with ideas to take in hand this issue of digital education.

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