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Covid-19 and its impact on Education system in India

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Abstract

The outbreak of Covid-19 had carried a new challenge to the field of Education that was being unexpected. As a result, we had to move from conventional education system to online learning (technology based) education system using different online platforms. Although most of the advanced educational institutions in India are not well equipped with digital facilities yet to cope with the sudden changes from traditional system to digitalized system, they are more hopeful to continue their educational activities through online.

In the review of literature section, we have summarized the learning from various reviews of literature relating to our subject. By studying these, we have learnt that the outbreak of Covid-19 has impacted immensely to the education sector by creating many opportunities for digital education in the developing countries like India, though it has more challenges also.

However, this online mode of education has more challenges as well as its opportunities which are discussed in this paper.

Keywords

COVID-19, Pandemic, Online learning, Pedagogy, Digital education, ICT

Introduction

The Outbreak of Covid-19 created by novel corona viruses, a large family of viruses was first identified as β -Corona virus in December 2019 in Wuhan, Hubei Province, China (WHO, 2020 b) and then it continues to spread worldwide with devastating consequences. These Viruses are named by the International Committee on Taxonomy of Viruses (ICTV) as “Severe Acute Respiratory Corona Virus-2” (SARS-CoV-2), which was announced by WHO on 11th February, 2020 (WHO, 2020) and this new human infectious disease has been named as ‘Corona Virus disease 2019’ and in short form called ‘COVID-19’. It was observed by ICTV that the virus is genetically related to corona virus responsible for the SARS outbreak of 2003, but these two are different. Now, from various research works, the scientists are able to identify different variants of these SARS-CoV-2 viruses as they constantly change through mutation(s) and so new variants of a virus are expected to occur over time. Moreover, multiple variants of these viruses that cause COVID-19 have been detected in different countries like USA, Brazil, South Africa, UK and so on. Recently, in India again a new variant, named B.1.617, has been detected for the first time in February, 2021 (CDC report, May 5, 2021) and now it has reached at least 17 countries from Britain and Iran to Switzerland, sparking global concern. Of course, this new variant is still being investigated by scientists across the world. However, it is not yet known how far it has spread or whether it is driving the deadly ‘second wave’ of COVID-19 in India itself (BBC News, May 7, 2021). After all, this virus has brought the world globally into a battleground of life and death. It is also very clear that SARS-CoV-2 pandemic is not only a threat among the lives physically but also has devastating impact on human beings in different sectors viz. economic, education, employment, social, marketing and agriculture etc. According to UNESCO, the COVID-19 outbreak has highly impacted the education system in the world (UNESCO, 2020 b).

Objectives

This paper intends to critically understand the issues related to the impact of covid-19 pandemic on the education system in India and also aims to analyze the opportunities and challenges of digital education system during this pandemic situation along with some effective suggestions for continuing education.

Methodology: Our paper is completely review based analysis with careful consideration of the quality based sources.

Impact of Covid-19 on Education system in India

The outbreak of Covid-19 had carried a new challenge to the field of Education that was being unexpected. It had spread very fast globally and significantly disrupted the education system which is the pillar of growth and development of all countries. As a first preventive measure to control this highly contagious disease, WHO advised to maintain social distancing by wearing face mask as compulsory.

Then most of the countries of the world had ordered closure of all educational institutions as a primary stage of lock-down. The government of India also announced a country wide lockdown of all educational institutions on 16th March, 2020 [Jena, P.K, (2020)]. All examinations of schools to universities including different entrance tests were postponed for an indefinite period. Then all the teachers’ community along with guardians and students were quite confused and did not understand how to cope with the environment of this crisis that obliged closure of the educational activities (Jena, P.K, 2020). The union government ordered to all states to take necessary steps regarding academic activities of all educational institutions for do not hamper during this lockdown period.

As a result, we had to move from conventional education system (that is, traditional face-to-face learning) to online learning (technology based) education system (Yeshe Ngima et al., 2020) using different online platforms like Zoom, Teachmint, Google-meet, WebEx meet, Whats App and YouTube etc., that creates a technology based environment for the educational institutions to strengthen the digital knowledge along with infrastructure (Pravat, 2020 a). But it is noteworthy to mention that although most of the advanced educational institutions in India are not well equipped with digital facilities yet to cope with the sudden changes from traditional system to digitalized system, they are more hopeful to continue their educational activities through online. However this online mode of education has more challenges as well as its opportunities which are discussed in this paper.

Review of literature:

In this section we have summarized the learning from various reviews of literature relating to our subject. By studying those, we have learnt that the outbreak of Covid-19 has impacted immensely to the education sector by creating many opportunities for digital education in the developing countries like India, though it has created many challenges also. In this connection, some reviews of literature are stated as follows:

T. Muthuprasad et al.,(2021) conducted an online survey among 307 agricultural graduates from different universities of National Agricultural Research system (NARS) for student's perception and preferences for "online education in India during covid-19 pandemic". Their findings indicates that

- Two major drivers behind the demand for online education are Flexibility and Convenience
- The digital devices of India and lack of equity in access to uninterrupted internet providing to be a hassle to many students.

In their studies, it has been recognized various components by the respondents for conducting online classes successfully like—nature of content, infrastructure, competency of the instructor, students readiness and follow up, and different subcomponents. Also, it should be provided the minimum technical requirement such as high speed data with internet connection, devices and required software. Besides, some factors that causes to failure of online classes, are also reflected in their research study which are technological constraint, distractions, Instructor's incompetency, learner's inefficiency, and health issues. Out of them technological constraint has been marked as the biggest challenge. Finally, majority of the respondent commented that online classes will be effective only when the classes are well structured and interactive with flexible curriculum, uninterrupted internet connectivity with competent instructor.

Jena,P.K,(2020) studied the impact of Covid-19 on Education and initiatives of the Govt. of India during this pandemic . It was found that there are so many positive impact of covid-19 on education sector as well as its negative impact. His study reported that India, a developing country is not fully well equipped to make online education reach all the corners of the country. So, the Govt. has more responsibility to strengthen the weakness so that the remotest and the poorest communities also are able to access the digital devices with internet connectivity.

Pokhrel,S. & Chhetri,R.,(2021) found in their studies that the teachers and learners should be oriented on use of different on line educational tools for effective online teaching. They reported that the education system across the world needs to invest on professional development of teaching, especially on ICT and effective pedagogy to cope with the present scenario. In most of the developing countries like India the affordability and accessibility of data package for all the learners belonging to different economic background is marked as a

challenge. Further they suggested to continued online teaching using different online tools to enhance teaching- learning system after the situation coming back to stable, that is , post covid-19 outbreak.

Crawford et al.,(2020) have discussed and analyzed the intra-period higher education's responses of 20 countries in the world regarding this pandemic situation. They state that the social distancing strategies on higher education, needs a rapid curriculum development for fully online learning.

Tadesse,S.,& Muluye,W. (2020) reviewed the impact of covid-19 on education system in developing countries and found that distance learning is a solution to continue the education system although it is challenging in developing countries due to lack of some major factors like Skill, ICT infrastructure, internet access and educational resources (Basilaia & Kvavadze,2020). Further, they also reported that the Govt. of the concern countries should design a strategy to scale educational technology during outbreak, establish zero-rating educational resources on the internet, prepare digital teaching and learning resources, utilizing free-online learning resources, practice mobile learning and grow-up ICT infrastructures.

Zhu,X.D & Liu, J.(2020) also suggested distance learning which may be acted as a good opportunity in the closure of educational institutions that effect negatively on the mental and physical health of the students, parents and teachers. They forwarded to develop some actions like introduction of online learning platforms; use of black board, Zoom, TronClass, Classin and WeChat groups platform; conducting online training and collecting information on all courses to meet up the challenging in this context.

Dong,B et al.(2009) have presented an e-learning ecosystem based on cloud computing infrastructure called blue-sky cloud framework to improve the availability performance and scalability of this learning system. They claimed that it is reliable, flexible, and cost effective, self regulated, and QoS (quality of service) – guaranteed which will solve the challenges on e-learning system.

Opportunities in Education sector for COVID-19

COVID-19 pandemic has created many opportunities in the field of teaching-learning which are unlike the face-to-face traditional system of learning. In the papers of (Dhawn,2020) and (Pokhrel,S & Chhetri, R.,2021), it has been also stated that the outbreak of COVID-19 has provided us with an opportunity to go through the way for introducing digital learning. Some major opportunities are discussed as follows:

Distance learning: distance learning is a good opportunity made by Covid-19 pandemic for the educators, teachers and students community. Of course, this one is not new mode of delivery for developed countries with a few of developing countries. It helps to continue the learning staying at home through online education system without any breaking as it is more flexible and more convenience. In this learning mode, Learners can able to choose when, where, and how they learn by selecting the time, place and course for their education.

Innovative ways for Assessment and Evaluation: The outbreak of Covid-19 provides an opportunity to the Teachers to take some innovative measures to fit with the online mode for fast and fair assessment and evaluation after taking a test. They are enforced to use some online assessment tools for creating a better learning environment like—

- Google Forms—easy to use and create online forms.
- Socrative—quizzes and questions with real time grading
- Kahoot—game-based assessment tool.
- Mentimeter—Pre-built education templates.

- Poll everywhere—permitted teachers to ask their students a question, etc.

Flipped Classroom: It is a simple instructional strategy and a type of blended learning which aims to increase learners' engagement and learning by having students complete reading at their own learning place and work on live problem solving during class time. There are so many online tools which are used to conduct a more structured flipped class room and to make more engaging also. Out of them some popular tools are as follows

- **Google Drive**—it can be embedded into almost any online learning platform.
- **YouTube**—it offers a user friendly, universally understood platform for pre-prepared lectures and other educational videos; for sourcing and sharing new materials.
- **Flipped Learning Network (FLN)**—It contains resources for all kind of flipped class rooms while facilitating discussion, problem solving and peer interaction.
- **Teachem**—In learning management system (LMS), this tool helps the teachers to create classes from YouTube videos or source from YouTube itself by adding time-stamped flash cards, smart notes and review questions.
- **Camtasia Studio**—this one is a most popular screen casting technology through which the teacher can source new and existing screen-captures powerpoint presentations, webcam Videos and even videogames to create course work. Quiz creation and sharing across mobile and tablet devices also included in this tools.
- **Edmodo or Schoology**—It is an online and mobile social learning platform that provides an easy and safe way for teachers-students to connect and collaborate, share content, distribute quizzes and access class work, manage communication with students, parents and colleagues in an online environment. By using this, teachers and students can reach out to one another and comment by showing ideas, problems and helpful techniques.

Learning Management system (LMS): it is a software application that helps the teachers to deliver and manage all types of contents including video lectures and allow students to access all course content from any device by creating a streamlined communication channel between instructor and learners in the online learning environment. Besides, it provides the attendance management, discussion boards, gamification, teacher's communications, dash boards, reporting, and students profile. Hence, it is more helpful for the educational institutions to offer online courses as the demand of e-learning is emerging for the outbreak of Covid-19. There are so many LMS which are useful in online education. Some of best LMS are Google Classroom, Canvas, Blackboard, Zoom, Schoolgy, Edmodo, WizIQ, Mentoring Minds, and Pocket Study etc.

Challenges of online learning

Although there have been a lots of opportunities created by the outbreak of Covid-19 for the online education, there are overwhelming challenges for the students, teachers, parents and the educational institutions. Here, some of the major challenges which are identified and highlighted by many researchers are summarized as follows:

The affordability and accessibility of varieties online infrastructure for all the learners belonging to varied economic background are identified as a major challenge. According to (Murgatroid,2020) and (Pokhrel,S. & Chhetri,R.,2021) broadly identified challenges with e-learning are accessibility, affordability, flexibility, learning pedagogy, life-long learning and education policy. There are still many people in the developing countries like India, who are unable to afford online learning devices, who are not well familiar with the modern daily uses equipment and latest technologies and as a result there arises inequality among the

students which leads to them towards depression and suicide. For instance, in this India a 14years old girl in Malappuram district of Kerala committed suicide due to incompetency of her family to afford a Smartphone for her online classes (The Hindu, June 11, 2020). Again as an another report, for the same situation, a 16 years old boy belonging to Chirang district of Assam in India, took his life (The Hindustan Times, June 24, 2020). In west Bengal, a girl of class-X also committed suicide at Bali because she was not able to attend her online classes and was afraid of failing her examinations (Dalit Camera, June19, 2020). These are just few examples only out of many such cases of students taking drastic steps of committing suicide, those are reported from across the country.

The proper professional development and training of teachers in order to use of the ICT with effective pedagogy for online learning are broadly identified as a major challenge. Although most of the teachers are just conducting classes through video platforms like Zoom, Google meet, Teachmint etc., but these are not be real online learning without any dedicated online learning platform. Students and parents also require training for effective online learning, but such support is still limited in the developing countries. According to (UNESCO, 2020b) report the rapid transition to online learning has been challenging even for students, teachers and parents in countries with reliable ICT infrastructure and internet access.

It is also another challenge for the teachers to find the genuineness of the assignment and examinations or actual learning taking place as these are carried by students from their home. It is very difficult for teachers to monitor the students how they are taking courses online and to ensure that whether students are cheating or not during online exams (basilaia & Kvavadze, 2020). In another research work done by (Osman,2020) and (Tadesse,S. & Muluye,W.,2020), it is reported that the assessment and evaluation of students performance in online learning is difficult for both instructors and students particularly teaching practicum, technical competencies and the assessment of practical skills.

Discussion and Conclusion

The findings of our study indicates that though COVID-19 pandemic has created many challenges in the field of education, it has served as an effective revolutionary agent for promoting rapid adoption of online learning. It has created many opportunities to go through the way for introducing digital learning which are unlike the face-to-face traditional system of learning. It is worth mentioning that distance learning is marked as the only solution at the closure of all educational institution without any breaking by staying at home. Moreover, it gives an opportunity to take some innovative ways by using various online tools for creating a better teaching-learning environment. However, for making online teaching creative, innovative and interactive, the teachers and the students should be oriented on the use of different online educational tools.

It is noteworthy to mention that India is a developing country which is not fully digitally equipped to make education reach all the corners of the country. So, for creating a better environment for online education, it is an urgent need to take plane and strategy by the government of India to remove all the barriers regarding affordability and accessibility of varieties online infrastructures for all the learners belonging to varied economic background. Moreover, to make success of this learning, it is also an urgent requirement to invest on the professional development of teachers in order to use of the ICT along with suitable pedagogy. Finally, as online education is more flexible and more convenience; and is benefiting the students immensely, it should be continued after the pandemic settles down and should be prepared our self for the digital oriented environment in the near future.

References:

Basilaia,G., & Kvavadze,d. (2020), Transition to Online Education in Schools During a SARS-CoV-2 Corona Virus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, 5, Article No.em0060.

<https://doi.org/10.29333/pr/7937>

BBC, May7,(2021). B.B.C News, 7th May, 2021

<https://www.bbc.com/news/in-pictures-57010451>

CDC, May5, (2021). Report of Centre for Disease Control and Prevention, May5, 2021

<https://wwwnc.cdc.gov/eid/current>

Crawford,J.,Butler-Henderson, et al.,(2020). COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses. *Journal of Applied Teaching and learning*, 3, 1-21.

<https://doi.org/10.37074/jalt.2020.3.1.7>

Dong,B., zheng, Q., Qiao, M., shu, J, Yang, J. (2009), Bluesky Cloud Framework: An E-Learning Framework Embracing Cloud Computing. Lecture notes in Computer science, vol 5931,pp.577-582. *Springer*, Berlin, Heidelberg.

<https://doi.org/10.1007/978-3-642-10665-1-55>

Jena, P.K,(2020). “Impact of Pandemic Covid-19 on Education In India”, *International Journal of Current Research*, Vol.12 (07), p.p. 12582-12586, July, 2020.

Jena,P.,K., (2020 a). “Challenges And Opportunities Created By Covid- 19 For ODL: A Case Study of IGNOU”, *International Journal For Innovative Research In Multidisciplinary Field*, Vol.6 (5), P.P.217-222.

Murgatrotd, S. (2020), COVID-19 and Online learning, *Alberta*, Canada.

Doi:10.13140/RG.2.2.31132.85120

Osman, M.E (2020), Global Impact of Covid-19 on Education: The Emergency Remote Teaching at Sultan Qaboos University, *Journal Of Education For Teaching*, 1-10.

<https://doi.org/10.1080/02607476.2020.1802583>

Pokhrel,S. & Chhetri,R.,(2021). A Literature Review on Impact of Covid-19 Pandemic on Teaching and Learning. *Higher Education For The Future*,8(1), 133-141

<https://journals.sagepub.com/doi/full/10.1177/2347631120983481>

Tadesse,S.,& Muluye,W. (2020). The Impact of COVID-19 Pandemic on Education System in Developing Countries: A Review. *Open Journal Of Social Science*, 8,159-170

<https://doi.org/10.4236/jss.2020.810011>

T. Muthuprasad et al.,(2021). Students Perception and Preference for Online Education in India during Covid-19 Pandemic. *Social Science & Humanities Open* 3(2021) 100101

<https://doi.org/10.1016/j.ssaho.2020.100101>

UNESCO (2020 b). UNESCO rallies international organizations, Civil Society and private sector partners in a Broad coalition to ensure learning never stops.

WHO (2020 b), Archived: WHO Timeline-COVID-19, 27 April 2020.

<https://www.who.int/news/item/27-04-2020-who-timeline--covid-19>

WHO (2020). Novel Corona Virus (2019-n Cov): Situation Report, 22. World Health Organization.

<https://apps.who.int/iris/handle/10665/330991>

Yeshi Ngima et al.,(2020). “Impact of Pandemic Covid-19 on Education”, *International Research Journal on Advanced Science Hub(IRJASH)*, Vol.02 (10s), Oct., 2020.

Zhu,X.D & Liu, J.(2020). Education In and After Covid-19: Immediate Response and Long Term Visions. *Post digital Science and Education*, 1-5

<https://doi.org/10.1007/s42438-020-00126-3>

