

Research Note on Online Learning in India – Issues and Challenges

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Abstract

The research note focused on understanding the online mode of learning in India. The sudden outbreak of Covid-19 during 2020 transformed the traditional teaching into an online learning process. The pandemic has shown that it is important for the Indian education system to be prepared to face such challenges in the future as well. The research note was prepared based on secondary sources of existing literature on online learning. From the research, some key issues and challenges that the Indian education system is facing in the online mode of teaching were identified. Some of which include student enrollment, quality, infrastructure, technical and privacy issues, research and innovation, outreach and accessibility, and technical knowledge of teachers. With the emerging new normalcy, this research note focused on analyzing the perspectives of online education in India, and it could be a factor in understanding and contributing to thereof in decision making. The note also made its point that by implementing the suggestions provided, the Indian education system will be prepared to face any such situations in the future as well.

Keywords : online learning, issues, challenges, outbreak, Covid-19

JEL Classification Codes : A21, A22, A23, I21, I23

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The year 2020 brought a sudden change in the lives of people around the world. A sudden halt in all the activities across the globe shook the functioning of all the sectors. Even before one could realize, there were lockdowns everywhere around the globe to contain the spread of the Coronavirus infection. An unprecedented scenario emerged in a very short span of time, where the entire world had no other way out but to completely lockdown their countries to protect the human race. An invisible microscopic organism started taking over the mighty human mind. All the sectors including the financial sector, health sector, and education sector have seen a rapid change. Economies have been affected ; the health sector started to function at a rapid pace to meet the needs of the people and the education sector was in doldrums.

Education in India has always been through the traditional mode of teaching, emphasizing on practical training to enhance the employability skills of the students and to allow the students to face the competitive world with more confidence. Ancient Indian universities like Takshashila, Nalanda, and Mithila were considered as treasures of knowledge and temples of learning. Other age-old universities in India such as the University of Mysore, Osmania University, University of Allahabad, and Banaras Hindu University have also proven that India has since long given due importance to education in the country. However, the Indian education sector, though it has inculcated the digital pedagogies, always focused on the traditional classroom teaching which

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involved a constant interaction between the teachers and the students. Many countries throughout the world have also been following the similar mode of teaching.

However, the last decade has witnessed a drastic change in the utility of the digital technologies for teaching in higher education in India. Prior to 2020, Indian educational institutions were oblivious of online education. No institute offered online coursework for more than 25% in a course (Gupta, 2021). Digitalization and online teaching and learning were in an infancy stage in schools, colleges, and universities (Agarwal, 2017). But the sudden outbreak of the Covid-19 pandemic in 2020 has transformed the education system and has led to an upsurge of digital learning in India. Digital or online learning is now a modern face of the education system in the entire world. With the declaration of lockdown by the Government of India to contain the spread of the Coronavirus, the functioning of educational institutions and the fate of the students and their studies were in doldrums. Keeping the situation in view, the educational institutions had to at once chalk out plans for the recovery of the stagnancy and instill confidence among students about their studies. Therefore, all the stakeholders of the education sector started planning for the recovery and reopening of the institutions as per the instructions issued by the Government of India for the delivery of the academic sessions and completion of coursework. The prevailing situation of the pandemic and the concern about the health and well-being of students has, however, propelled the education sector to complete the delivery of the academic schedules through online learning without hindering the future of the students. The National Education Policy 2020 has also stressed about digitalization of education in the country. The budget of Government of India allocated 93,224 crores to the Ministry of Higher Education for digitalization (Akash, 2018). Despite several steps taken to continue the learning process of students through the online mode, a sudden jump to the new normal has posed several challenges to the stakeholders.

A thorough literature search has revealed studies related to online learning, which emphasized on strengths, weaknesses, opportunities, and challenges (Dhawan, 2020) ; student perceptions ; effective tools (Gaikwad & Randhir, 2016) ; challenges, trends, worldwide status, and implications (Palvia et al., 2018) ; and adoption of online learning during lockdown in India (Mathivanan et al., 2021). The present research note is an attempt to analyze the issues and challenges faced by the stakeholders of the education system as we step into the new normal, the online learning. The research note would be helpful for researchers, academicians, policy makers, and stakeholders of the education system.

Online Learning - An Outlook

We are living in a world dominated by technology, which plays a significant role in the digitalization of the Indian education system. Social media has also become an integral part of every individual's life. Cumulatively, all these have helped make online learning a preferable tool in this unprecedented situation. With just a click of a button, a teacher or an instructor sitting at one place can connect and interact with students sitting in another place. Affordable high-speed internet has also evolved new avenues of the digital education system in India. With the diffusion of the latest technologies, there has been a huge fall in the cost of establishment, which is motivating the educational institutions to adopt such technologies which promote quick learning among students (Arora & Srinivasan, 2020). Digitalization has the power to take quality education to villages and tier 2 and 3 cities and all over the country. Future of the education system seems to be reliant on the online mode of learning. With the upsurge of Covid-19 cases and waves of Covid-19 re-emerging after every few months, the online learning mode seems to give an advantage to learning and staying safe.

Online learning is a process where the student learns through a virtual mode instead of the physical mode. This mode of learning utilizes technology to deliver classes, which stimulate and improve the traditional physical teaching. Online learning will become mainstream by 2025 (Palvia et al., 2018). However, the debate

on the possibilities of online teaching and learning to be a superior replacement of traditional approach is still a quest. Also, with the emerging new normalcy, there exists a need to analyze further on all the perspectives of online education, and this research note could be a factor in understanding and contributing to thereof in decision making.

Online Learning - Issues and Challenges

The issues and challenges of the online mode of learning are discussed in the following paragraphs.

Student Enrollment

Despite initiating and investing on the lucrative features of online learning, the institutions are confronting a crisis on students' enrollment in courses, and this acts as a huge challenge for the institutes to administer the functions and existence, perhaps acting as a threat to faculty fellows. In the developed countries like USA, online learning enrollment is outpacing the conventional enrollments (Dziuban et al., 2016). In the Indian context, there is a decline in enrollments through the online learning system. Allen and Seaman (2017) described that the Indian online education system stood with an average of 1.6 million users. As per KPMG, it is expected to grow to around 9.6 million users by 2022. However, out of the several reasons for the decrease in student enrollment, the main reason points at the financial crisis in the families due to disruption in livelihoods due to COVID-19, which is compelling parents to discontinue the studies of their wards only with an intent to enroll them back in school/college after the physical classes open. Despite of some institutions waiving off the course fees and providing adequacy to learn online, still the enrollment is at stake. Could the reason be a cognitive perception on investing in education or hindrance in adaptability or accessibility of online learning ?

Quality of Education

The second prominence is on quality of education. This is a major concern for students and their parents about the quality of education being offered through the online mode of learning. The online learning platforms, though can serve the purpose of delivering classes in these testing times, there is a lacuna. There is no direct interaction of the student with the teacher. To avoid technical problems, students are asked to keep their video turned off during the class. This, in turn, is decreasing the ability of the teacher to understand if the student can grasp what is being taught in the class. The instructor may thus continue with the class irrespective of the students' understanding of the subject matter. The interactive teaching and learning process is also being hindered, to a certain extent, in the online mode of learning. All these, in turn, may reflect on the quality aspect of the teaching – learning process. There are no criteria, which can determine the quality of education being delivered in the online mode. This indicates the teachers to use the digital pedagogies such as polling, quick quiz, class participation, presentations, or a quick review, etc. However, there is no consistent mechanism to evaluate the engagement of students and provide the quality education accordingly. Some of the online course providing platforms do have sophisticated tools that ensure that learners are engaged. However, do the Indian institutions have investment efficiency to maximize the quality of education through such features ? There exists a void.

Infrastructure

The third note is related to infrastructure. Educational institutions never imagined that the current pandemic situation as this would arise ; so, the infrastructural facilities in many schools, colleges, and universities sufficed with only the traditional mode of teaching. The infrastructural facilities in many educational institutes cannot

support the online mode of teaching and learning. To build digital infrastructure in Indian universities, the government has launched the National Optical Fibre Network to create a fast network and speedup broadband connectivity (Kaplan & Haenlein, 2016). Even though the world is moving towards digitalization, the lack of importance given to digital infrastructure to support during the times of need as that of the COVID - 19 pandemic in accreditation and assessment scales has left the infrastructure incomplete. It is important to use accreditation and assessment scales to push the digital infrastructure.

Technical Knowledge of the Teachers

Used to the traditional mode of teaching, many teachers have found transformation to online mode of teaching very difficult. Most of the teachers did not get any official training on the use of the online platforms for teaching to cope with the sudden upheaval and to keep themselves abreast with the current technology, and started attending online webinars and conferences on their own interest and investment.

Teachers additionally are dealing with demanding situations like lack of technical facilities, loss of training, paucity of clarity and direction, lack of technical expertise, however, they are seeking to make contributions from their end through converting their conventional teaching to the Ed Tech coaching to make the teaching execution effective. Higher educational institutions, teachers, and government institutes are frequently developing guidelines, pedagogy, and strategies to implement online teaching effectively. It may also appear that instructions are being run easily, and the teachers will now no longer be disturbed, however, the hassle is deep-rooted (Kaplan & Haenlein, 2016). However, are the teachers' technical know-hows measured and updated by the policy makers or the educational bodies? This indicates a huge challenge as unless the service characteristics are known to the service providers, how would the teachers deliver the expected quality knowledge?

Technical and Privacy Issues

Most of the online learning platforms are subject to technical glitches due to problems from the apps, network issues, and power cuts. This creates interruption of classes, which poses a problem to the teacher and student who misses the continuation of the topic. Such technical glitches also result in students losing interest in joining the classes repeatedly. Online privacy is another important issue which needs to be taken up seriously by the developers of the online learning platforms as well as the end users. Lack of consent, absence of safety safeguards, and post-hoc supervision of the recordings of classes lead to infringement of privacy, self-expression, and autonomy of a student (Bajpai, 2020). This indicates the need for further research on bringing the evaluative measures to ensure the management of technical and privacy issues.

Research and Innovation

Though classwork and coursework of students from school level to university level are being taken up through the online mode, the major stakeholders who are facing difficulties during these testing times are the researchers. Research forms a major chunk of knowledge creation in universities. Researchers in arts, humanities, and social sciences are going an extra mile ahead to use online platforms for collection of data from their target population through questionnaire based and survey-based methods. However, researchers in the field of science, engineering, and technology require access to laboratories for conducting experiments ; they require access to instrumental facilities for analysis and knowledge of interpretational software to come up with the results. The online mode cannot help such researchers to move ahead with their research. A research based in Romania revealed that there was no clear stipulation by the Romanian government in their educational policies about e-learning programs (Cojocariu et al., 2014). We need a high level of preparedness so that we can quickly adapt to

the changes in the environment and can adjust ourselves to different delivery modes, for instance, remote learning or online learning in situations of pandemics such as Covid-19. Institutions and organizations should prepare contingency plans to deal with challenges such as pandemics and natural disasters (Seville et al., 2012).

Since the research and academic teaching blend to generate an updated knowledge, it is decisive for the policy makers to formulate strategies on ensuring the continuous process of research. Adequate research in this arena is predominant as research constitutes to elevation of knowledge and thereby to students for learning.

Outreach and Accessibility

A few modes through which the Government has ensured continuous interaction with the student fraternity are Gyandarshan, e-GyanKosh, Swayam, e-Adhyayan, e-Pathya, SAKSHAT, National Digital Library of India (NDLI), Virtual Labs, e-Yantra, Free/Libre and Open-source Software for Education, National Educational Alliance for Technology (NEAT), etc. Accessibility has been a greatest challenge that most of the educators and deciding bodies confront. Not that all have accessibility tools and required bandwidth of materials. Since the online learning depends on the digital gadgets and modes of internet, it becomes a vital factor for the policy makers to assess the accessibility of learners to the knowledge. It is evident that the pandemic has indicated the need for accessibility to digital tools and materials for acquiring knowledge to the students and so as for the teachers to deliver those. However, the recent news outlines (OECD Policy Report, 2020) pointed that students, though they want to be educated despite the pandemic, have constraints in accessibility. However, there is no mechanism to identify and solve the issues related to accessibility. Research pertaining to this arena helps the decision makers to implement consistent and wide online learning curriculum and strategies.

Policy Implications

The research note has highlighted the key issues and challenges being faced by the stakeholders of the Indian education system in taking up the online mode of learning. The cognitive perception among stakeholders on investing in online education should change. The hindrance in adaptability and the constraints in accessibility should be addressed. The accreditation and assessment bodies in India, which certify and give rankings to various educational institutions, should also include grading points for digital infrastructure implementation and should propose suitable indicators to measure the quality of online education. Service characteristics should be known to the service providers to deliver quality education. Training the teachers officially with due permissions from the parent institutes and allocating considerable points to the certificates awarded for attending these programmes, which help faculty in the Career Advancement Scheme, can be motivating for the faculty to attend such programmes and learn about new web-based technologies and online platforms which they can apply in their regular online teaching.

Empowering the faculty with online teaching tools can metamorphose the teacher – centric learning to student – centric learning, making the learning process more fun and livelier for both. Indian institutions should have investment efficiency to maximize the quality of education. To address the technical and privacy issues, institutes should negotiate with the app developers and prefer purchasing user friendly and safe software. A unified platform should be developed to deliver online classes in such situations, and the platform should be given to every school, college, and university by the Government to ensure that students get the right knowledge at the right time in the right way. Evaluative measures should be taken up by the policy makers to ensure management of technical and privacy issues. Distributing laptops/smartphones to students belonging to low-income groups can help them attend online classes without any issues. Making available free wi-fi connectivity to every village, town, and city in the country can also help students continue their educational

journey without any break. Policy makers also need to formulate strategies to keep research going on during such unforeseen situations as research contributes to a major share of the knowledge pool of the universities.

Conclusion

Though the online mode of learning provides its own advantages, the Indian scenario has witnessed challenges. Students, teachers, parents, and other stakeholders of the educational system in India have adapted to the very quick change in the scenario that happened at once. However, still there are certain issues and challenges, which need to be addressed and solutions to these problems need to be sought. By implementing the suggestions put forth in the present research note, many challenges can be solved. However, a collective effort of the Government both at the Central level and State levels, the concerned ministries, and the stakeholders of the system can keep us prepared for such unprecedented situations in the future. By strengthening our education system to function through the online mode, to a certain extent, even after the pandemic situation normalizes, is an appreciable move and the blended mode of learning can become the new normal, provided the issues and challenges addressed in this research note are addressed.

Author's Contribution

The research note is solely prepared by A. Arun Kumar based on the readings from literature.

Conflict of Interest

The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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References

- Aggarwal, R. (2017). Economics of e-learning in higher education : The Indian case. *Prabandhan : Indian Journal of Management*, 10(6), 40–48. <https://doi.org/10.17010/pijom/2017/v10i6/115374>
- Akash. (2018, July 12). Reforming education through digitization. *Digital Learning*. <https://digitallearning.eletsonline.com/2018/07/reforming-education-through-digitisation/>
- Allen, I.E., & Seaman, J. (2017). *Digital learning compass : Distance education enrolment report 2017*. <https://onlinelearningsurvey.com/reports/digitallearningcompassenrollment2017.pdf>
- Arora, A. K., & Srinivasan, R. (2020). Impact of pandemic COVID-19 on the teaching – learning process : A study of higher education teachers. *Prabandhan : Indian Journal of Management*, 13(4), 43–56. <https://doi.org/10.17010/pijom/2020/v13i4/151825>

- Bajpai, H. (2020, August 14). Surveillance on students raise privacy concerns on online education platforms. *The Leaflet*. <https://www.theleaflet.in/surveillance-on-students-raise-privacy-concerns-on-online-education-platforms/>
- Cojocariu, V.- M., Lazar, I., Nedeff, V., & Lazar, G. (2014). SWOT analysis of e-learning educational services from the perspective of their beneficiaries. *Procedia-Social and Behavioral Sciences*, 116, 1999–2003.
- Dhawan, S. (2020). Online learning : A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- Dziuban, C., Picciano, A. G., Graham, C. R., & Moskal, P. D. (2016). *Conducting research in online and blended learning environments : New pedagogical frontiers*. Routledge, Taylor & Francis Group.
- Gaikwad, A., & Randhir, V. S. (2016). E-learning in India : Wheel of change. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 6(1), 40–45.
- Gupta, S. (2021, March 17). How digitisation and technology are shaping education in India. *The Hindu Business Line*. <https://www.thehindubusinessline.com/opinion/how-digitisation-and-technology-are-shaping-education-in-india/article34090642.ece>
- Kaplan, A. M., & Haenlein, M. (2016). Higher education and the digital revolution : About MOOCs, SPOCs, social media, and the cookie monster. *Business Horizons*, 59(4), 441–450. <https://doi.org/10.1016/j.bushor.2016.03.008>
- Mathivanan, S. K., Jayagopal, P., Ahmed, S., Manivannan, S. S., Kumar, P. J., Raja, K. T., Dharinya, S. S., & Prasad, R. G. (2021). Adoption of e-learning during lockdown in India. *International Journal of System Assurance Engineering and Management* (2021). <https://doi.org/10.1007/s13198-021-01072-4>
- OECD. (2020). *Strengthening online learning when schools are closed : The role of families and teachers in supporting students during the COVID-19 crisis*, *OECD COVID-19 Report*. https://read.oecd-ilibrary.org/view/?ref=136_136615-o13x4bkowa&title=Strengthening-online-learning-when-schools-are-closed&_ga=2.28953596.116384470.1628441869-288225107.1628441869
- Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online education : Worldwide status, challenges, trends, and implications. *Journal of Global Information Technology Management*, 21(4), 233–241. <https://doi.org/10.1080/1097198X.2018.1542262>
- Seville, E., Hawker, C., & Lyttle, J. (2012). *Resilience tested : A year and a half of ten thousand aftershocks*. University of Canterbury.

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