TEACHING-LEARNING SYSTEM DURING COVID-19

KANTA RANI

Assistant Professor, Dept. Of Computer Science ,M. M. P. G. College

Email: kambojkanta72@gmail.com

ABSTRACT

The spread of pandemic COVID-19 has drastically disrupted every aspects of human life. During the lockdown period of Corona virus disease in India as well as all over the world has wrecked the entire education system from primary to higher level. Due to lockdown many educational institutions, campuses are closed and teaching-learning has moved online. This research paper is delineate on teaching–learning behavior in the online environment conditions, such as those caused by COVID-19. The research includes the importance of online learning and Strengths, Weaknesses, Opportunities and Challenges analysis of e-learning modes in the time of crisis. Online teaching-learning mode has worked as an impetus for the educational institutions to grow and opt for platforms with technologies, which have not been used before. The education sector has been fighting to survive the crises with a different approach and digitizing the challenges to wash away the threat of the pandemic. Result and analysis indicated that lack of facilities, infrastructure, technical tools and the internet access are the major drawback for conducting online sessions. The suggestions are provided to improve the current online teaching methods to outreach many students and improve quality teaching-learning experience.

Keywords: Covid-19, Lockdown, Online teaching-learning modes, challenges of E-learning system

Introduction:

The pandemic Covid-19 has spread over whole world and compelled the human society to maintain social distancing. It has significantly disrupted the education sector which is a critical determinant of a country's economic future. In Wuhan, the pneumonia of unknown cause was first detected and reported to World Health Organization (WHO) Office on December 31, 2019. Since then, this epidemic spread all around the globe. World Health Organization broadcasted the name novel corona virus disease (COVID-19) on February 11, 2020. WHO announced the COVID-19 is a pandemic on March 11, 2020. On September 26, 2020, there were 32,110,656 active cases with a death count of 980,031 in world. On September 26, 2020, India reported there are of total 960,969 cases and 93,379 deaths. Corona virus is affecting the normal life in every possible manner. An unprecedented worldwide lockdown has not only made our life miserable, but also imposed us to live inside our homes. Extremely rare events like this are witnessed only once in a lifetime or two. Indian government announced we need to adjust to this environment, by maintaining social distance among them. The lockdown effect shuts almost all sectors which made large impact on economy in most of the countries. The country's economy is affected badly by the following sectors such as, automotive, transportation, shopping malls, hotels, restaurants, tourist, sports leagues and public events, airbus, service sectors and education. However, still the educational institutions remain closed as they find it difficult to maintain social distance in place.

In India, higher education system at present is at a transition stage. A stage where changes have taken place for good and more transformations in thoughts and processes are desired. Higher education system in any nation today seeks a relook. Higher 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 higher 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 sensitivity of learning and new opportunities that the technology offers. This changeover has been easy for the autonomous/deemed and private institutions, in the other hand it is a challenge for the public ones. As the COVID-19 emergency arises many universities in India to temporarily close the onsite classes.

Online Learning or E-learning

Nowadays, the higher education system is in a continuous process of change, universities having to keep pace with the needs, desires, and requirements of students. Thus, information technologies and E learning systems are seen as

essential factors in carrying out the activity of universities, these institutions investing more and more in online systems and devices. However, in the technology era, one of the main challenges of universities is the integration of innovative E-learning systems so as to reinforce and support both teaching and learning. Due to its complexity, multiple definitions are proposed for the concept of E-learning. In a simple way, E-learning means using information and computer technologies and systems in order to build and design learning experiences. E-learning as a concept that uses electronic media represented by the internet, CD-s, mobile phones, or even television, in order to provide distance learning and teaching.

E-learning OR Online learning offers many benefits for students because this type of learning involves student-centeredness, it is more flexible, and it can also improve interaction with students by providing asynchronous and synchronous tools such as e-mail, forums, chats, videoconferences. Furthermore, internet technologies facilitate the distribution of content at the same time, to a large number of users; E-learning platforms offer many advantages to learners such as control over the content, control over the time spent learning, and thus the process can be adapted according to the learner needs and objectives of learning. This might contribute to better communication with the students and in spite of some inherent challenges brought by this time of crisis, E-learning might enhance the learning process for students. However, when using E-learning platforms there are also some elements that might be considered obstacles in students' process of learning, such as decreased motivation in students, delayed feedback or help due to the fact that teachers are not always available at the time students may need help while learning, or feelings of isolation due to lack of physical presence of classmates. Nonetheless, these obstacles can be overcome with the help of teachers who should adapt their teaching strategies to the needs of students. In order to do so, experience and knowledge about teaching in the online environment are necessary. Thus, we believe that these challenges and disadvantages could be more prominent while the educational process takes place exclusively online. This might happen due to the lack of teachers' experience in using E-learning and due to the short time in which they had to adapt their teaching style to the new conditions. Both university members and students came across many challenges. The Organization for Economic Co-operation and Development mentioned that some of the challenges universities have to face were: keeping an equilibrium between online courses, that could affect students health, them spending many hours in front of a screen, and non-digital activities, analyzing and focusing on student's emotional health providing them with support throughout the process of learning, taking into account the fact that not all students have access to the internet, and managing and monitoring their access to devices in order to effectively collaborate with them. Furthermore, universities also struggle with keeping the content of the course consistent and relevant, with communicating clearly with the academic community, and also with acquiring and recruiting students. On the other hand, students also had to face challenges and a study focusing on students' perspective on E-learning identified that among the main challenges that students encountered were accessibility, connectivity, lack of appropriate devices, social issues represented by the lack of communication and interaction with teachers and peers. Taking into account the aspects mentioned above we believe that the transition to exclusive E-learning can highly affect the educational process and student's perception about the use of the online environment in the process of teaching and learning, and these ideas stand at the basis of our research. We considered it important, relevant, and necessary to analyze whether students have adapted to E-learning and whether they are satisfied rather than dissatisfied with this exclusive online experience.

The aim of the paper is to identify the student's perspective on the E-learning experience during the Corona virus pandemic in order to improve and strengthen the E-learning system. In other words, our study examines the way the process of learning was affected during this time of crisis and investigates the student's view on the use of E-learning platforms and how these technologies influenced their understanding and assimilation of information. Furthermore, we were also interested in identifying the main difficulties that students encountered while learning online, and in which context they would like these platforms to be further used by universities.

Thus, our research can contribute to the development of the E-learning process, for it provides information on the usefulness of certain methods used in order to deliver the courses, the time spent on completing tasks and projects, the content of the course, and also student's grievances, recommendations and preferences for teaching techniques.

Research Methodology

Various reports of National and International agencies on Covid-19 pandemic are searched to collect data for current study. As it is not possible to go outside for data collection due to lockdown, information is collected from the

secondary data. A systematic review was done in detail for the collected literature. Secondary sources of data used are (a) journals, (b) reports, (c) search engines, (d) company websites and scholarly articles, (e) research papers, and other academic publications.

Emerging approaches of India for Higher Education during Covid-19

Many challenges are created by Covid-19. The HEIs have responded positively and adopted various strategies to face the crisis during the pandemic. The Government of India has also taken number of preventive measures to prevent spread of pandemic Covid-19. The University Grants Commission (UGC) have made several arrangements by lunching of many virtual platforms with online depositories, e-books and other online teaching/learning materials, educational channels through Direct to Home TV, Radios for students to continue their learning. During lockdown, students are using popular social media tools like WhatsApp, Zoom, Google meet, Telegram, You-tube live, Facebook live etc. for online teaching learning system. UGC has released Guidelines on Examinations and Academic calendar in view of COVID-l9 pandemic with new dates keeping in view of the lockdown. Some of the digital initiatives of UGC for higher education during COVID-19 are pointed as below:

e-GyanKosh (http://egyankosh.ac.in/) is a National Digital Repository to store and share the digital learning resources which is developed by the Open and Distance Learning Institutions of India.

Gyandarshan (http://www.ignouonline.ac.in/gyandarshan/) is a web based TV channel devoted to educational and developmental needs for Open and Distance Learner. A web-based TV channel devoted to educational and developmental needs of the society

Swayam provides Massive Open Online Courses (MOOCs) with 140 universities approved credit transfer feature. Swayam Prabha provides high quality educational programs through 32 DTH channels transmitting educational contents.

e-Pathya (Offline Access) is one the verticals of e-PG Pathshala which is software driven course/content package that facilitates students pursuing higher education (PG level) in distance learning as well as campus learning mode. It also facilitates offline access.

National Digital Library of India (NDLI) (https://ndl.iitkgp.ac.in/) is a repository of e-content on multiple disciplines for all kinds of users like students (of all levels), teachers, researchers, librarians, library users, professionals, differently-able users and all other lifelong learners. It is a virtual repository of learning resources with a single-window search facility. It is also available to access through mobile apps.

FOSSEE (https://fossee.in/) is short form for Free/Libre and Open Source Software for Education, which is developed to promote open source software for education as well as professional use.

Virtual Labs (http://www.vlab.co.in/) has developed web-enabled curriculum based experiments designed for remote operation. It has over 100 Virtual Labs consisting of approximately 700+ web-enabled experiments which are designed for remote-operation. It provides remote-access to Labs in various disciplines of Science and Engineering. These Virtual Labs caters to students at the undergraduate level, post graduate level as well as to research scholars.

e-ShodhSindhu (https://ess.inflibnet.ac.in/) is a collection of e-journals, e-journal archives and e-books on long-term access basis. It provides access to qualitative electronic resources including full-text, bibliographic and factual databases to academic institutions at a lower rate of subscription.

Shodhganga (https://shodhganga.inflibnet.ac.in/) is a platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access. The repository has the ability to capture, index, and store, disseminate and preserve Electronic Theses and Dissertations submitted by the researchers.

VIDWAN (https://vidwan.inflibnet.ac.in/) is a premier database and national research network which has profiles of scientists/researchers and other faculty members working at leading academic institutions and other Research & Development organizations in India.

National Educational Alliance for Technology (NEAT)(https://neat.aicte-india.org/) is an initiative for skilling of learners in latest technologies through a Public-Private partnership model between the Government (through its implementing agency AICTE) and the Education Technology companies of India. It brings the best technological products in education pedagogy on a single platform for the convenience of learners.

SAKSHAT (https://sakshat.ac.in/) is one Stop Education Portal for addressing all the education and learning related needs of students, scholars, teachers and lifelong learners. The portal provides the latest news, press releases, achievements etc related to Ministry of HRD.

Strengths of E-learning

E-learning methods and processes are really strong. These strengths of the online learning modes can rescue us from these hard times. It is student centered and offers a great deal of flexibility in terms of time and location. The e-learning methods enable us to customize our procedures and processes based on the needs of the learners. There are plenty of online tools available which is important for an effective and efficient learning environment. Educators can use a combo of audio, videos, and text to reach out to their students in this time of crisis to maintain a human touch to their lectures.

Weaknesses

E-learning has certain weaknesses in the form that it can hamper the communication between the learner and the educator, that is, direct communication and human touch are lost. Users can face many technical difficulties that hinder and slow-down the teaching–learning process. Time and location flexibility, though it is the strength of online learning these aspects are fragile and create problems. Student's non serious behavior in terms of time and flexibility can cause a lot of problems. All students and learners are not the same; they vary in degrees of their capabilities and confidence level. Some do not feel comfortable while learning online, leading to increased frustration and confusion. Inadequate compatibility between the design of the technology and component of psychology required by the learning process; and inadequate customization of learning processes can obstruct the teaching process and creates an imbalance.

Opportunities

Online learning generally has a lot of opportunities available but this time of crisis will allow online learning to boom as most academic institutions have switched to this model. Online Learning, Remote Working, and e-collaborations exploded during the outbreak of Corona Virus crisis. Now, academic institutions can grab this opportunity by making their teachers teach and students learn via online methodology. The people have always been complacent and never tried some new modes of learning. This crisis will be a new phase for online learning and will allow people to look at the fruitful side of e-learning technologies. This is the time when there is a lot of scope in bringing out surprising innovations and digital developments. Already, EdTech companies are doing their bit by helping us fighting the pandemic and not letting learning to be put at a halt. Teachers can practice technology and can design various flexible programs for students' better understanding. The usage of online learning will test both the educator and learners. It will enhance problem-solving skills, critical thinking abilities, and adaptability among the students. In this critical situation, users of any age can access the online tools and reap the benefits of time and location flexibility associated with online learning.

Challenges

Online learning faces many challenges ranging from learners' issues, educators' issues, and content issues. It is a challenge for institutions to engage students and make them participate in the teaching–learning process. It is a challenge for teachers to move from offline mode to online mode, changing their teaching methodologies, and managing their time. It is challenging to develop content which not only covers the curriculum but also engage the students. The quality of e-learning programs is a real challenge. There is no clear stipulation by the government in their educational policies about e-learning programs. There is a lack of standards for quality, quality control, development of e-resources, and e-content delivery. This problem needs to be tackled immediately so that everyone can enjoy the benefits of quality education via e-learning. One should not merely focus on the pros attached to the adoption of online learning during the crises but should also take account of developing and enhancing the quality of virtual courses delivered in such emergencies. A lot of time and cost is involved in e-learning. It is not as easy as it seems, a considerable amount of investment is needed for getting the devices and equipment, maintaining the equipment, training the human resources, and developing the online content. Therefore, an effective and efficient educational system needs to be developed to impart education via online mode.

Ensuring digital equity is crucial in this tough time. Not all the teachers and students have access to all digital devices, internet, and Wi-Fi. Unavailability of proper digital tools, no internet connections, or iffy Wi-Fi connections can cause a lot of trouble due to which many students might lose out learning opportunities. Efforts should be taken by institutions to ensure that every student and faculty is having access to the required resources. They must also ensure that all the

educational apps work on mobile phones as well, in case students do not have laptops. Therefore, steps must be taken to reduce the digital divide. Practice makes a man perfect is a famous and very true proverb. Students and teachers across various universities have never really practiced e-learning. A step-by-step guide can be prepared by academic institutions that can guide the teachers and students on how to access and use various e-learning tools and how to cover major curriculum content via these technologies thereby reducing the digital illiteracy. Teachers can present the curriculum in various formats, that is, they can use videos, audios, and texts. It is beneficial if educators complement their lectures with video chats, virtual meetings, and so on to get immediate feedback and maintain a personal connection with the students.

Result

The results of this study are that there are several obstacles experienced by students, teachers and parents in online teaching and learning activities, namely mastery of technology is still lacking, additional internet quota costs, additional work for parents in assisting children in learning, communication and socialization between students., teachers and parents are reduced and working hours are unlimited for teachers because they have to communicate and coordinate with parents, other teachers, and school principals. The COVID-19 pandemic affects many things including educational life.

Suggestions

1. Educators and learners should be trained to utilize online teaching learning process using technology. Policy should be adopted by Government/educational institutions to provide free internet and free digital gadgets to all learners in order to encourage online learning as a result of which people would get engaged and remain safe during pandemic.

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

3. If the pandemic Covid-19 continues, new approaches for academic assessment should be adopted by educational institutions. Academic assessment of the students may be done through online mode or through quizzes and small projects.

4. Government should support HEIs to strengthen their resources to run virtual educational activities. Students also need to be supported with better access to internet and technology as most students are unable to afford the facilities. During this pandemic, the HEIs should focus more on virtual educational activities including television, radio and web-based education.

5. WHO has recently pointed out that the Covid-19 may never be eradicated and people will have to live with it. "It is important to put this on the table: this virus may become just another endemic virus in our communities, and this virus may never go away. HIV has not gone away, but we have come to terms with the virus. I think there are no promises in this and there are no dates. This disease may settle into a long problem, or it may not be" WHO emergencies expert Mike Ryan said in an online briefing. With reference to this statement, many countries are now planning to continue education through distance or virtual mode and India should plan for the same also.

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