6. E-Learning Initiatives in Assam, During and Post Pandemic Covid 19

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Abstract:

The onset of COVID 19 outbreak has changed the entire educational system in the world with Assam as no exception. The entire educational system has moved to 100 percent online mode overnight. The online education has started in each and every part of India because of the nationwide lockdown in end of March 2020 and it still continues till date (September 2020). This paper reflects the educational situation in Assam during and post pandemic COVID 19. The study has been conducted with the help of both primary and secondary sources of data. The study found that though many students are getting online classes to enhance their knowledge, there are many who are left out in this crisis time as they do not have access to internet and smart phone.

Key words: e- learning in Assam, COVID 19, online learning, Rural, Urban, Semi urban population.

6.1 Introduction:

Since March 2020, billions of students across the globe were out of school due to the closure of pandemic COVID 19. To slow down and prevent its spread, many countries including India followed strict protocols, such as complete lockdowns or regulations to facilitate social distancing. Government of India issued many regulations to stop the viral outbreak such as working from homes or closing many institutions where people could infect one another with COVID19 (Bozkurt, Sharma, 2020). This situation forced all levels of educational institutions to operate online or remotely maintaining social distancing. Because of this situation the e-learning initiatives have been undertaken in Assam.

The internet as the backbone of e -learning was developed in 1969 by the Advanced Research Project Agency of the Department of Defense, United States. Since then the Internet has grown exponentially with the emergence of World Wide Web (WWW) in 1991. In India first publicly available internet service was launched by VSNL on 15th August 1995 (Wikipedia.org). The internet and its WWW have captured the imagination and interest of many educators around the world leading to use of terms such as web-based learning, online-learning etc. Now this e-learning has become the only option during this pandemic Covid 19 situation. Different researcher has defined e-learning in many ways. S. Naidu (2006) has defined e- learning as intentional use of electronic media and Information and Communication Technologies in teaching and learning process. In general term we can say that, e-learning is the use of networked information and communication technology used in teaching and learning.

It gives us the advantage of 24X7 and 365 days access compared to conventional mode where time is rigid. The web-based learning environment provides lots of advantages such as quick production, alteration and updating of course materials, location and time independent delivery of course materials etc. But on the other hand, access to computer and internet is a major problem for many. As stated by Goel S. (2012) e-learning can best be defined as the science of learning without using paper printed instructional material. With the progress of information and communication technology development, e-learning is emerging as the paradigm of modern education. The advantages of e-learning include liberating interactions between learners and instructors, from limitations of time and space through the asynchronous and synchronous learning network model (Pei-Chen Sun et al., 2008).

A number of terms are used to describe this mode of teaching and learning. They include online-learning, virtual learning, distributed learning, network and web-based learning etc. The term e-learning comprises a lot more than only online mode of learning, as the letter "e" in e-learning stands for the word "electronic". E-learning would incorporate all educational activities that are carried out by individuals or groups working online or offline (S. Naidu, 2006). E-learning can be a powerful and cost-effective alternative to classroom learning but it restricts to only those who can have the access to electronic media and here the most of the students of Assam are deprived of.

6.2 Rationale of the Study:

During this pandemic time, e-learning is the only option in the delivery of educational opportunities to the learner. The first case of COVID 19 pandemic in Assam was reported on 31st March 2020 and as of 31st August 2020, total positive case is more than one lakh with fatality rate 0.38% (www. wikipedia.org). The lockdown in Assam started from 23rd March along with the other states of the country. It is almost five months that entire conventional educational system is closed. The state government has now announced that they will slowly open the educational institutions starting from class IX to XII and gradually they will open the other classes also in phase wise manner. This paper tries to explore opportunities for disseminating education through online mode in Assam in this tough time.

6.3 Characteristics of E-Learning:

There are many factors potentially influencing e-learning effectiveness, such as media characteristics, learning context, technology, and learner characteristics. While studies show that e-learning can be at least as effective as conventional classroom learning under certain situations, but it is also dependent on situation and e-learning cannot replace traditional classroom learning under certain circumstances.

But the need of the hour is that we have to opt e-learning as a tool of education. Not every student will find e-learning suitable for his or her learning style. Some students are not used to this technology and some gets bored of using technology. With proper training to the teachers and the students, e-learning can substitute the classroom learning to some extent. Efforts should be given on how to create more appealing and effective online-learning environments. One way to achieve this is to integrate appropriate pedagogical methods, to enhance system interactivity and personalization, and to better engage learners (Zhang et al., 2004).

As stated by Kybartaite et al. 2010, the web-based learning environments can be of two types: synchronous and asynchronous learning. Synchronous learning occurs where an instructor teaches a traditional class with the teacher and students online simultaneously and communicating with each other. Again, in case on asynchronous learning, instructor interacts with students intermittently and not in real time.

6.4 Methodology:

Today, e-learning is still in an early stage in Assam. The pedagogy used for learning in Assam during this pandemic time has been categorized under primary, secondary and higher education. The area selected for this study are rural, semi urban and urban. The study covers selective area of lower Assam, which represents only a small portion of entire Assam. The learning institutions considered in this study includes both government and private institutions. Personal telephonic interview and secondary data have been the source of information presented in the study. For each segment 35 respondents were interviewed based on convenient sampling. For each selected area, data have been collected for Primary, Secondary and Higher educational institutions. The respondent selected for this study are teachers, parents and students in each category. The area selected for this study are shown in the following table.

Table 1: Selection of area at different levels of education:

Primary Education Institutions			Secondary Education Institutions			Higher Education Institutions		
Rural	Semi-urban	Urban	Rural	Semi-urban	Urban	Rural	Semi-urban	Urban
Barpeta	Mangoldoi	Guwahati	Barpeta	Mangoldoi	Guwahati	Barpeta	Mangoldoi	Guwahati
Sarupeta	Jagiroad, Digaru	Tezpur	Sarupeta	Jagiroad, Digaru	Tezpur	Sarupeta	Jagiroad, Digaru	Tezpur

From the study it has been observed that, all the primary, secondary and higher educational institution in Assam started the e-learning programme as replacement of conventional learning. Most of the primary and secondary institutions concentrates on synchronous mode of online studies whereas for higher educational institutions, they are using both synchronous and asynchronous mode of online learning.

6.5 Governmental Measures:

India had 37.4 million students enrolled in higher education in 2018-19. The country has become the second largest market for e-learning after the US (www.ibef.org). The government of India has taken many measures in this field focusing on new education techniques such as e- learning and m- learning. Swayam platform has emerged as the largest online platform in the world today. Other MHRD initiatives like e- PG Pathsala, National Digital library, Vidwan, e- Shodh Sindhu, etc. have benefited many students and teachers. The government has taken the initiatives to launch mobile apps for NEET and JEE examinations. For the benefit of students residing in rural area, government has strengthened 32 existing Swayamprabha TV channels which are available on dish TV, Doordarshan etc. (as stated by Dr. Ramesh Pokhriya, Hon'ble Minister of Human Resource Development, in a webinar").

6.6 State Government's Initiatives in Assam:

The government of Assam has taken many measures to continue education during this pandemic time. In Assam, the learning takes place in both vernacular medium (Assamese medium) and English medium. The government owned schools and colleges are providing education mostly in Assamese medium for primary and secondary levels and higher educational institutions provide in English medium. The school session in Assam starts from January and ends in December (for State Board), but this time due to the pandemic situation government has decided to extend the session till March (Hindustan times news, Guwahati). The Assam government has declared early summer vacation for schools and colleges as a precautionary measure amid Covid 19 lockdown. The state government has suspended all teaching and learning activity from 23rd of March and declared early summer vacation in May instead of July which is the usual summer vacation time. All government schools were instructed to commence compulsory online classes for class X and XII from April. Apart from conducting classes in local television channels, government has initiated the new television channel called "Gyanbriksha" for Assamese medium learner. Many local channels were providing classes for learners in specific time slot in local Television channels. The Hon'ble Education Minister of Assam in a press release stated that, after lockdown 4.0, the schools and colleges will gradually open. He also stated that the classes might start for class X and class XI students and then from class VIII onwards it may start in alternate days.

This year, due to the pandemic situation government has declared all admissions of state's Universities, Colleges, and institutions will conduct all admissions in online mode for the forthcoming session.

6.7 Teaching Learning Tools Used by Different Institutions During the Crisis:

It has been observed from the study that most of the schools and colleges are using e-learning techniques for disseminating regular classes in urban and semi urban areas and few in rural areas. Most of the schools and colleges are conducting regular online classes with the help of mobile phones and internet services. But the worst sufferer in this situation are the students who resides in rural areas and who does not have internet or mobile connectivity. Many of them do not have television and smart phones at their home. Many of them do not even have electricity. And with the first wave of flood in many villages the situation has worsened. In a tragic incident, a 15-year-old students of class X from Chirang districts of Assam committed suicide as he failed to attend online classes and exams because of non-availability on smart phones (www. nenow.in). The total population of Assam is 3.5 crore (www.populationu.com). And out of this 86% lives in village area (https://des.assam.gov.in). So, the situation is really pathetic. Though all the institutions are providing online education, the quality and pace varies from institute to institute. In this situation, open and distance universities have less damages of COVID 19 than traditional universities. The traditional universities of Assam are conducting classes through online mode with the help of mobile and computer applications. The open and distance-learning is convenient for many people because of its flexibility and cost effectiveness. Krishna Kanta Handiqui State Open University (KKHSOU), is providing education to its learner during this COVID 19 pandemic time in following ways: different multimedia tools like CDs, DVDs of the learning materials are distributed to the learners on regular basis for facilitating better understanding among the learners. University also conducts counselling sessions through KKHSOU You Tube channel with nearly twenty thousand subscribers.

KKHSOU has a full-fledged official website (www.kkhsou.in) for its learners and general public. The Website provides all relevant information to its stakeholders. An e-learning portal by the name of e-SLM (http://eslm.kkhsou.in/) has been launched by the university and all the study materials of the programmes can be assessed in this portal. To provide easy access to various open access journal across the world, KKHSOU has developed the Open Access Journals Search Engine (OAJSE) which is available for the users from the URL www.kkhsou.in/library/oajse. The university has its own mobile application to help the learners to connect 24x7 with the university (www.kkhsou.in).

6.8 Use of Online Educational Tools in Assam during This Pandemic Time at Different Levels:

For primary educational institutions for both private and government medium schools, the following two facilities are used only in English medium schools of urban and semi urban areas of Assam. The researcher get no information related to online class for primary school children in rural area in Assamese medium. In the study it has been observed that, hundred percent (100%) respondents agree that they are getting WhatsApp messages from teachers related to class (irrespective of rural, semi urban or urban area). Eighty six percent (86%) respondents say that they are also getting you tube link related to class.

- YouTube link
- WhatsApp messages (typed and voice messages)

For secondary educational institutions for both private and government medium schools in urban, semi urban and rural areas of Assam the following online tools are used:

- You Tube link (82% response)
- WhatsApp messages (100% response)
- Google class (85% response)
- Google meet (65% response)
- Free Conference call App (14% response)

Some of the respondents from rural area complaints that, though online classes are going on, due to the poor connectivity, they are unable to get the lessons.

For Higher educational institutions for both private and government institutions in urban and semi urban areas and few in rural areas of Assam the following online tools are used:

- You Tube link (100%)
- WhatsApp messages (100%)
- Google class (65%)
- Google meet (67%)
- Free Conference call App (40%)
- Zoom (60%)
- Facebook live classes (25%)
- SWAYAM (25%)
- SWAYAM prabha (18%)

- Soodhganga (35%)
- Email/ discussion forum/ blogs (40%)
- Facebook (60%)
- Online Digital Library etc (35%)

The tools mentioned in the above category are based on the personal interview of teachers in each category. It has been observed from the study that, there is not much online activity visible in the rural areas of Assam. For students of class IX, X, XI and XII online classes were held in rural areas, but could not get much response from primary and higher educational institutions. Availability of online material in vernacular medium is another issue in this regard.

6.9 Strategies for E- Learning Implementation:

Though different schools and colleges are providing e- learning classes to the students, the credibility of the classes is at stake. As the students and teachers both are not trained in this system, proper training and strategy is needed in future for successful implementation of e-learning.
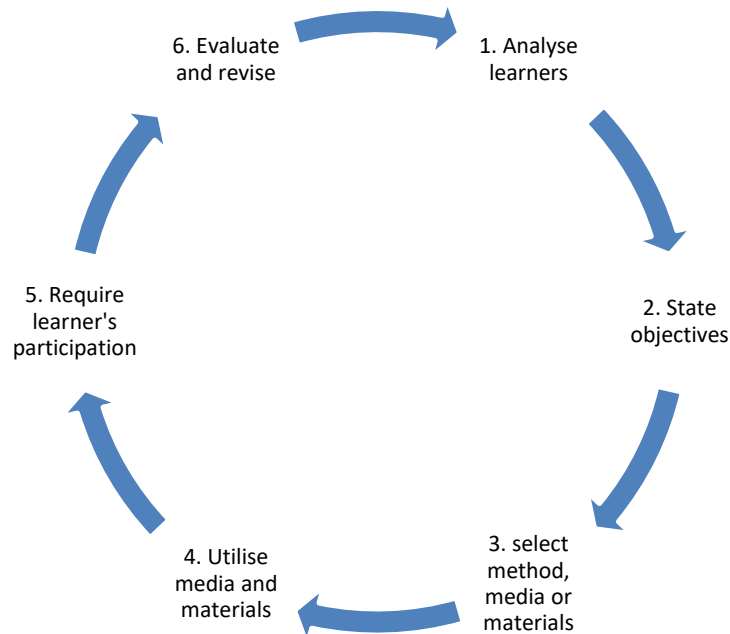
In this study it has been found that the duration of classes in different schools and colleges varies from 1 hour to 6 hours per day, which is a huge variation. Just consider this for three months it will be almost 450 study hours of difference. There needs to be some uniformity among the schools and colleges for conducting online classes.

Though government has stated regulations regarding the class hours, many schools are doing it as per their own convenience. We have now seen that the education system, in general, is unprepared and vulnerable to external threats. As a response to the global educational crisis, online teaching has been put into practice. However, we stumble into defining what we are desperately trying to accomplish. Online education is a learning process that provides learners agency, responsibility, flexibility and choice. It is a complex process that requires careful planning, designing and determination of aims to create an effective learning ecology (Bozkurt, Sharma, 2020).

One can adopt ASSURE model, for proper implementation of e- learning. Government can also think of blended learning approach for future implementation of e- learning courses in long run. To make this approach successful first we need to analyse the learners, whether they are in primary level, secondary level or in higher education.

The grasping power of learners varies depending on their age and environmental factors. So, the strategic plan should be as per the requirements of the learner of each segment. Once the analysis of the learner is done, specific objectives needs to be set for each category of learners.

There will be different methods, media and material needed for different segments of learner. Learners can use different Open Educational Resources available in the internet or materials can be prepared for learners depending on their requirements. There should be two-way communication between the learner and the instructor, so learners; participation is also very important. Then at the end of this process things need to evaluated and revised to measure the effectiveness.

6.10 ASSURE Instructional Design Model:

Source: https://www.instructionaldesign.org

In this regard, when we consider online distance education, we should go beyond sharing simple tools, tips and tricks and instead focus on the changing learners' needs, learning contexts, and the availability and accessibility of the tools. Another significant distinction we have to highlight is how learners are involved in the process.

Today an entire industry has emerged to do virtual class. Course Management System software has been used by many schools and colleges in the United States of America like blackboard (www.blackboard.com), WebCT (www.webct.com), e college (www.ecollege.com), Moodle (http://moodle.org) etc. which can also be in the future of Indian virtual classrooms.

Initially a blended form of e learning approach can be adopted by our institutions. For conducting effective e-learning, proper assessment mechanism should also be there.

6.11 Conclusion:

The world is changing and the educational system is also changing because of this pandemic COVID 19. During this pandemic time, more than 300 million students worldwide are having their education disrupted. As stated by Lynch (2020), global pandemics require highly motivated, highly educated bureaucrats; schools that train students to think both deeply and flexibly; and teachers that can model critical thinking and problem-solving. As the situation emerged all of a sudden, we need to cope up with the situation as well as we need to prepare for future educational system. Many educational institutions are developing online materials to provide helping hand to reach this learner in different way. The entire educational system should collaborate with different stakeholders to come up with better way of teaching learning.

Government of India is providing free educational learning material through SWYAM platform. E- Learning is the need of the hour. It can be enjoyable to those who can have access to it. The state government of Assam is also trying its best to provide e-learning facilities to the learners to overcome this situation. Thus, the day is not far away when e-learning will become the future popular method of education throughout the world.

6.12 References:

Journals:

1. Aras Bozkurt, Ramesh C. Sharma (2020) Emergency remote teaching in a time of global crisis due to Coronavirus pandemic Asian Journal of Distance Education, (vol 15, issue 1)
2. Goyal S, (2012). E-Learning: Future of Education, Journal of Education and
3. Learning. Vol.6 (2) pp. 239-242.
4. Kybartaite Astha, Nousiainen Juha, Malmivuo Jaakko (2010) Technologies and methods in virtual campus for improving learning process, Computer Applications in Engineering Education
5. Maggie Lynch (2020) E-Learning during a global pandemic Asian Journal of Distance Education, (vol 15, issue 1)
6. Naidu, S (2006). E-Learning: A Guidebook of Principles, Procedures and Practices, 2nd Revised Edition, CEMCA.
7. Sun, P.C., Tsai, R.J., Finger, G., Chen, Y.Y. and Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction, Computers & Education 50: pp.1183–1202.
8. Zhang, D., Zhao, J.L., Lina-Zhou and Nunamaker, J. F. (2004). Communications of the ACM, 47(5): pp.75-79.

6.13 Web link:

- www.kkhsou.in accessed on 20/05/2020
- www.populationu.com accessed on 24/05/2020
- https://des.assam.gov.in accessed on 24/05/2020
- https://soodhganga.inflibnet.ac.in accessed on 24/05/2020
- https://www.instructionaldesign.org accessed on 25/05/2020
- www.wikipedia.org accessed on 24/05/2020
- Www. Walc.edu accessed on 30/05/2020
- www.ibef.org accessed on 20/06/2020
- https://nenow.in/north-east-news/assam/ accessed on 01/09/2020

6.14 Books:

1. Sanjaya Mishra (2010); "M-Learning"; Educational Communication Technologies (Block 2), IGNOU, ISBN: 9788126648764