

TEACHING AND LEARNING DURING PANDEMIC COVID-19: A CASE STUDY OF IGNOU

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Abstract: *In India, the UGC as a regulatory body to monitor the Higher Education in India has arranged and shared several online links which are useful for the students, faculties, academicians and researchers. To tune with UGC regulations, the role of IGNOU is important for sustainable development of the communities around us and to suggest the futuristic model(s) of ODL as a transformed form of capacity building of everyone, even during the pandemic of COVID-19. Though the present study is based on IGNOU admission data, but the similarity of situation across nations may make it useful for other open and distance learning systems as well. The National Education Policy 2020 is the first education policy of the 21st century and aims to address the many growing developmental imperatives of our country. This National Education Policy envisions an education system rooted in Indian ethos that contributes directly to transforming India, that is Bharat, sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower. Needless to say that IGNOU is already playing an important role to tune with the new education policy 2020.*

Key words: ICT, Pandemic, IGNOU, Enrolment & New Education Policy 2020

Introduction

Across the globe, teaching and learning have been grossly affected due to the COVID-19 pandemic. The lockdown due to COVID 19 has lead towards the alternatives of online instruction to ensure the continuation of education. Higher education has started moving towards developing an online mode of education or else it was put on hold. The Senate of IIT Bombay has taken the decision to move entirely towards the online teaching-learning for the rest of this year. The Alumni of IIT Bombay has come forward and have committed a good amount of support to the fellow students, who are from economically less privileged families for assisting them with the hardware devices like laptops, computers, internet and broadband connectivity to access online classes. All said and done COVID 19 has beyond the wildest imagination of the mankind, changed the ways to live, work, teaching & learning. Millions of students have been driven out of University campuses and Faculty is confined to their homes. This has forced the teaching community to look for alternatives to maintain the continuity in the teaching learning process. The pandemic has forced all the teachers to Work from Home (WFH). The transitions of standing before the students in the class rooms for delivering lectures into WFH may be the future of pedagogy is replaced by Facebook (FB) Live, Zoom or Google Meet, Microsoft Team, WebEx etc. in the recent few months /years. The technology-enabled learning has become handy to transform teaching & learning, now the students will need technology driven pedagogy to explore, understand and express them. The device (computer, mobile, tablet, etc.), social media, internet, Open Education Resources (OER) are going to bring fundamental structural change in Higher education.

Objectives of the Study

The study proceeds with the following objectives.

1. To present an overview of the role of changing technology in the open and distance learning system.
2. To present an overview of Challenges during Covid-19 and HEI interventions

Role of Changing Technology in The Open and Distance Learning System

With the advent of technology and frequently changing forms, the Open and distance learning system also, has significantly transformed its delivery mechanism. Upgraded platforms are ICT dependent and its success largely relies on quality of supplementary instruction and the expansion of educational opportunities circumventing the socio-economic-geographical limits, to attempt inclusion. The Commonwealth of Learning identifies the Open and Distance Learning system as “a way of providing learning opportunities that is characterized by the separation of teacher and learner in time, or place or both time and place; learning that is certified in some way by an institution or agency; the use of variety of media including print and electronic; two way communications that allow learners and tutors to interact; the possibility of occasional face to face meetings; and a specialized division of labor in the production and delivery of course”. Whether pandemic or no pandemic, catastrophes or no catastrophes, the physical separation of the teacher and the learners is important and the use of variety of media to maintain a two-way communication has been emphasized time and again. The only thing that varies is the time duration it takes, to overcome such interruptions. Overcoming the aftereffects of flood, terror attacks and mass destruction or a pandemic will take different time durations and it is important during this duration of time, that communication has to be maintained with learners to ensure zero loss of academic time. That’s where technology has a crucial role play.

Gade and Agarwal (2018) in their study, raised serious concerns about the e-readiness of two state open universities for adopting e-learning for information dissemination and research. They concluded that the technological, pedagogic readiness were high amongst the faculty including their own personal willingness and that the universities must move towards technology driven e learning. Rahman (2014), in his study focused on the role of ICT in open and distance education. He stated that application of technology in educationist not the ultimate goal. Instead it should be used to pursue quality. Since ICT has tremendous potential, it must be cautiously used with respect to appropriateness and acceptability in society as the socio economic background of an individual influences their ability to learn from different media technology.

Aoki (2012), while analyzing the generations of distance education with technologies and pedagogies concluded that distance education has been becoming more complex and multi-faceted as time has gone by with added features and technologies. With these technologies, now it is possible to achieve the ideal learning environment for a learner, that is customizable according to the individual learner’s needs and preferences. Sarmah and Lama (2017) highlighted the role of radio as the most efficient and cost effective medium of mass communication in distance teaching and learning, especially in the developing countries, like India, Indonesia, Nigeria, Thailand etc. They also highlighted the role of community radio which could be utilized for education purpose. Kumar and Sharma (2002), talked about radio technology and major radio educational projects to reaffirm that radio can be an effective medium in reaching out quality education and training to the needy ones. From the perspective of delivery technologies, the open and distance learning system has been classified into the following five categories by Taylor (2001).

- First Generation - Correspondence model with reliance on the print medium (study guides, text books and supplemental reading lists etc.). It was a one-way communication.
- Second Generation - With the introduction of radio in 1920s and TV in 1950s, the multimedia model with reliance on pre-recorded audio / video tapes / CDs and

- computer based learning was initiated. It initiated one way (from institution to students through broadcasts, audio tapes etc.) and two-way communication (from students to teacher through tutorials, phones etc.)
- Third Generation - The tele learning model with telecasts / broadcasts and audio / video conferences, facilitating two ways synchronous as well as asynchronous communication.
 - Fourth Generation - The flexible e-learning model with internet (www.) access to resources, online material with simple graphics, emails and interactive multimedia, computer mediated communication etc.
 - Fifth Generation - Intelligent flexible learning model with interactive internet technologies, computer mediated communication with automated voice response system. campus portal access to institutional processes and resources.

Since this model was introduced before the advent of social media and web 2.0 technologies (technology which allows creation and sharing of information by anyone with copyrights and ownership), it does not take into account the heavy reliance on web 2.0 and web 3.0 technologies such as Wikis, Blogs, Social Networking, Podcasting and Content Hosting Services like YouTube, etc. The Open Universities (OUs) have a greater challenge to effectively utilize technologies considering the facts that, the OUs have much higher enrolment as compared to the conventional systems and the OUs do not operate through a single campus instead operate through a collaborative network of institutions, which is geographically scattered may even be remotely located.

Pedagogy of Online Learning

Educational Technologists for long have advocated that Information Technology shall be a significant and legitimate substitute to enhance the outreach paradigm in education. This is the new paradigm added to the way teaching fraternity will interact with their students and among themselves in the future. The internet is going to be the treasure trove of amazingly well-curated content and pedagogical tools. This change is bound to inspire adaptability and creativity. There will surely be serious long term Lockdown effects, considering the scale of fast changes taking place in the economic, social and political arena. We find that the resources around us are not divided evenly, and some of us may face additional challenges around technology-access, internet-access, bandwidth, or even electricity. Blended learning implies that at least some of the learning is happening online, over the internet, using reasonably powerful devices, with the support and training to back them up. Yet in addition to above, it is forcing educators and parents to consider how technology can better support education, the sudden shift to remote learning has also exposed profound problems. Too many students are without internet at home, or adequate enough broadband to be able to participate in online teaching. There are many families, who cannot afford computers or mobile devices. The pivot to remote learning has surfaced inequalities that, though already present, were not highlighted by classroom-based education. I think the best technological innovation or change that should come next would come as a result of looking carefully at issues of equity and either redesigning existing technologies, or revisiting the whole endeavor. The current crisis has acted as a fillip to encourage digital education. It is equally important here to look for the judicious mix of Open Educational Resources (OER) along with delivery of education via television /satellite.

IGNOU and ICT

The Indira Gandhi National Open University (IGNOU) has a pan India jurisdiction and operates through a network of 56 regional centers and around 2800 learners support centers spread across the length and breadth of the country. There are 11 recognized regional centers under the Army, Navy and Assam Rifles Scheme with more than 80 learner support centers. The vast geographical spread of network including the remote and rural areas, huge enrolment and collaborative network with a variety of institutions makes it essential to ensure that appropriate technologies are in place to take care of the academic

requirement of each learner in order to promote inclusivity from the technological perspective. A brief about the technological initiatives of the University is mentioned hereunder. Though, a number of online facilities have been created for various learner services like development of institutional portal self-contained with information, online admission and re-registration, online submission of exam form, online submission of grievances etc., here we are discussing only about initiatives related to delivery of content and communication with students.

The Electronic Media and Production Centre (EMPC) of the University is mainly focused on the delivery of content. It facilitates audio and video programme production and also manages the broadcast of academic programmes through *Gyan Vani* FM radio and interactive radio counselling (IRC); internet based interactive web radio known as *Gyandhara* and telecast through the *Gyan Darshan* Channels. The University is also the National Coordinator for 5 DTH (direct to home) channels of the *Swayam Prabha*, which is housed in the Centre of Online Education (COE), IGNOU. The COE coordinates with Channel Coordinators for programme production, scheduling and management of these channels. The COE also maintains the *e-Gyankosh*, which is the online repository of self-learning material for around 227 programmes being offered by IGNOU. The IGNOU Student e-Content App is an ICT initiative to provide technology enhanced learner support by providing access to online repository of study materials that is *e-Gyankosh*. There also exists online repository of assignments, old question papers, prospectus of various programmes.

Apart from the delivery of content initiatives above, the learner connecting initiatives of the University include programme specific Discussion Forums for some of the programmes, The Web Enabled Academic Support (WEAS), which is a scheme initiated by the National Centre for Innovation in Distance Education (NCIDE), with the aim to provide an interactive one-stop programme portal, that helps students in getting academic support on the programme they are enrolled in. The University also has a Facebook page which keeps uploading videos having academic content from the teachers of the University. The Regional Centers also have their own web page, email ids, login credentials for iGRAM portal (IGNOU Grievance Redress & Management) and Facebook / social media accounts for maintaining the connectivity with students. The SMS facility is in place to keep learners informed about latest decisions on the academic programmes and calendar.

The assessment and evaluation activities (both formative and summative) are the only activity which is being done offline. The above initiatives go to a great length in reaching out to the unreached, beyond doubt. However, at the same time it needs to be ensured that the multiplicity of channels of communication should not leave a learner tangled in between selecting the mode to communicate or to learn. Especially, during the period of lockdown, where the face to face communication is at an absolute halt and not opened due outbreak but IGNOU is facilitating their learners with best quality of student support services. An over channelized stream of communication might lose its purpose and strength.

Suitable Usage of Technology for Better Outreach of IGNOU Programme

Considering the fact that though in India, mobile and internet subscription rates have rapidly increased over the previous decade but the penetration issue is yet to be addressed to bridge the 'digital divide' between rural / urban areas and also remote / difficult areas. As per the data of the Telecom Regulatory Authority of India (TRAI), in December 2018, the total tele density (wireless and wireline) at the all India level was 91.45 and it varied from 59.50 for rural areas to 159.98 for the urban areas. Similarly, the internet subscription base (broadband, narrowband and wired and wireless) per 100 of population was 46.13 for all India and varied from 23.87 in rural areas to 93.86 in urban areas. As per internet data, there are 260 million users (above 13 years of age) of social media in India.

Since the base of telephone, mobile and internet subscriptions are comparatively lower in rural areas, and considering the fact that quite a substantial number of students have taken admission from the rural areas, there might be a requirement of more initiatives through any mode of technology with a wider base. It may be construed from the discussion above, that tactical measures need to be implemented as far as technology usage is concerned.

Challenges during Covid-19 and HEI interventions

A plethora of 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.

Learning from Home in Times of Covid-19 Lockdown: Opening up Possibilities or Baring Inequalities?

HEIs in 188 countries are currently shut owing to the global Covid-19 pandemic. There is discussion around how to continue the teaching-learning process in these times of emergency. Many institutions have employed online learning tools to enable student-teacher interaction. Platforms like Microsoft Teams, Zoom and YouTube are being used to upload and view teaching content, conduct live lessons, and give and evaluate assignments. Some fundamental challenges have also been observed in research studies to viewing technology-enabled education as the magic bullet that shall allow the education process to carry on uninterrupted in current times.

Barriers of Access and Connectivity

Television and internet facilities are not default features of a household in every family but luxuries that they aspire to have some day. When we turn to digital learning, it is important to note the background and situation of learners for whom having the pre-requisites of digital learning is not a given. Continuous supplies of electricity, availability of a device with stable internet connectivity, basic digital literacy among students are some basic criteria for accessing of digital education. There is huge digital divide that exists, and one that is being brought to the force as we look towards technology in these times of crisis.

Lack of Teacher Preparedness to Use Technology

Use of ICT among teachers make effective of teaching-learning process. The capacities of teachers to conduct classes online, ensure that existing online learning modules are being completed by students, check for understanding using virtual platforms cannot be taken for granted. Without adequate training and support, the feasibility of use of ICTs is questionable, expecting teachers to seamlessly move to online platforms would be unreasonable.

Understanding between Parents and Teachers in use of ICTs

Even if we were to assume that the challenges of access and connectivity were resolved, there is a question of how to ensure that Learners get an environment conducive to learning. Small but significant prerequisites include a quiet space where Learners can engage with online classes with no interruptions. This would need a certain understanding between parents and teachers so that they create an effective learning space for Learners. Even during pre-lockdown times, this was a major challenge. Most teachers felt that it was very difficult to make aware parents to understand the academic issues their ward was facing and that they needed to be involved. Many believed “parents assume their job is done the moment their ward is enrolled into School/University”. They nevertheless shared that most parents, on one occasion or the other, had said that they wanted a better life for their learners than the one they were living and had requested teachers to guide their Learners. However, parents did not see much of their role except in enrolling their ward in school, and registering them for external tuitions. This disconnects between parents and teachers are likely to act as an impediment in using homes as primary sites of the schooling process.

The Socio-Economic Disadvantage

To add to the inequalities of access, connectivity and relationship with the HEIs and the lockdown has led to half a million migrant population to leave cities and go back to their native towns and villages. The current crisis has left no semblance of normalcy for them, as daily sustenance is a major cause of concern for many. Expecting that they should find ways to make their learners digitally connect with HEIs and participate in online classes would be arrogant and irrational.

Gender Gap

In the current situation, girls face a compounded predicament. In addition to suffering at the hands of the socio-economic disadvantage their families have been exposed to, the lives of girls have been affected in more ways. For many of them, the lockdown has meant an increase in domestic responsibilities. During my research, more than half the girls interviewed cooked meals for their families before coming to colleges in the morning. Some of them also got delayed in reaching colleges on a regular basis because they had household chores to complete before leaving home. For many girls, the hours they spent in colleges ended up being the only time they had to themselves and for studying. The current situation has presumably added to their responsibilities and taken them further away from the learning process. The COVID-19 pandemic is set to change the world sooner than we know. The way our governments, institutions, organizations, and people think and function, will radically change – perhaps for the long term.

Among many economic sectors, the higher education sector is undergoing a tectonic shift right now. What several futurists and education technologists have been forecasting for a long, is now happening. At least for two decades now, edutech (short for Education Technologies) enthusiasts have been predicting that technology will become the biggest intermediary of teaching–learning processes. In the wake of Covid-19 pandemic, millions of students across the globe have been driven out of their university spaces, and professors are confined to their homes. Higher education stands disaggregated, and faculty and students are grappling with the sudden new norm of completely tech-mediated teaching and learning. Over the past 20 years, this crossover to online learning was happening in fits and starts, in islands across different theatres – colleges, universities, skill development companies, and corporate learning centers. Most policy level changes remained half-hearted attempts stemming from old mindsets. At best, old processes were replicated with some modern technology tools for a few courses as an ‘experiment’, or part of their existing classroom courses as ‘blended learning’.

About 60 million students across the globe, are limited to home during the crucial months of February to April - which generally see a flurry of curricular and assessment activities. Institutions and students alike are under pressure to not lose academic time and re-invent their teaching-learning in the only possible way – go completely online. What does this mean for the institutions and academic leaders, administrators and students in the long run is getting clearer. The new, total technology-mediated education can be termed as Education 4.0, after the first three waves of education systems that evolved over 2000 years of civilization - the Gurukula system (one master to a few pupils), the traditional university system (one to many learners) and distance learning (one to very many learners across the spectrum). The good news is – the mainstream institutions are willing to move to online, and there’s a possibility of habits changing to enable Education 4.0. Or are we just being optimistic? Let us ask some sobering questions -

- Online higher education has been around for more than a decade now. Why did it not take over the conventional education system in the Pre-Covid era?
- Why is it not a norm already?
- When massive businesses have already moved from offline to online in the Pre-Covid era, why hasn’t higher education not moved to online?

While inertia and 'fiefdom' attitude of existing educators is partially to blame, the truth is, every industry that has become digital has had its own inertia and fiefdom hurdles. It is just that 'digital' brought in a massive wave of efficiency and effectiveness in these industries, and the pure economics and convenience of it washed away the inertia and fiefdom hurdles. In digital higher education, there has not been such a wave yet; it's important to understand this.

Several efficiency and effectiveness reasons have impeded this wave, such as:

- Abysmal completion rates in the digital higher education system;
- Non-existent rigor of assessment;
- Non-establishment or non-transparency about improvement in knowledge, application and competency in learners;
- Non-contextual delivery (context is a key success factor in higher education; it influences the learning outcomes. Faculty in a classroom setup can size-up and deliver the class);
- One-size-fits-all delivery;
- Practitioners trying to just 'transpose' classroom to the digital medium, which is causing many problems;
- Doing "live" classes may not bring in efficiency or effectiveness;
- Taking a concept all the way to application or higher-order thinking is missing; and many more reasons.

While the land is fertile for habits to change, the new digital landscape has its unsolved problems, and hence it is where it is.

Conclusion

It may be construed from the discussion above, that tactical measures need to be implemented as far as technology usage is concerned. The following measures could be supportive in better delivery of content as well as providing academic support to students in any institution. Programme wise approach – identifying the programmes with higher enrolment, especially from rural areas and without practical components and initiate the academic Counselling through centralized Radio Broadcast (Gyanvani, Gyandhara web radio), with pre-recorded audios and pre-recorded video telecast through National television (Gyan Darshan). Since radio and television have a wider coverage even in the remote rural areas and almost all households, utmost use of this source could be made for sequential transmission of programmes. All the programmes, where enrolment is less than 100 are largely urban centered (except a few) may put on Face Book Live or on any other cloud platform for providing necessary academic support or virtual platforms in the synchronous mode (web conferencing through Adobe Connect, Google Classrooms etc.) Formation of groups on Social media network and upload of videos could be another mode to connect. Such initiatives will ensure better inclusion and cater to the requirements of the masses without leading to multiplicity of platforms of interaction and will provide effective support during the lockdown period at least for a few months. Resumption of life and activities have always happened after such calamities in the past and the generations today, are better equipped with man-made technological resources to cope up with them.

The covid-19 crisis has thrown up unprecedented and complex issues for us all. In the education landscape, it has led to school closures and a disruption of the teaching learning process. The primary response mechanism has been to turn to online tools and platforms, and leverage technology to continue the process. While this has opened up possibilities for distance learning, it has also revealed glaring challenges that stem from economic, social, digital, and educational inequalities. Solutions that do not take into account these challenges would not only widen the learning gap on a socio-economic basis

but may also make it more difficult for them to catch-up and for us all to realize the promise of education- at the heart of which lies equity and inclusion.

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