

**EDUCATIONAL RESOURCE MANAGEMENT IN POST COVID ERA OF
HIGHER EDUCATION**

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ABSTRACT

The structure of schooling and learning, including teaching and assessment methodologies, was the first to be affected by the Pandemic covid -19. Over 37 million students in higher education in India have restricted to home, 79.8% students are undergraduate, 10.8% postgraduate and the rest are at diploma level, majority are in teacher training, nursing etc. Needless to say the pandemic has transformed the centuries old, chalk-talk teaching model to one driven by technology (e-learning). The Open Education Resources (OER) are of utmost inevitable in higher education in post covid era. The term OER was initially adopted at 2002 UNESCO forum on the impact of open courseware for higher education in Developing countries to refer some related contents such as "Open courseware", "Open learning resources" and "Open teaching learning resources". Since then, the OER initiative has been increasing in a sustained way and the OER management is a must for higher education in post covid era. In this context, the two large scale OER websites are MERLOT II (www.merlot.org) and OER commons (www.oercommons.org) For effective digital learning Techno pedagogical skills are needed. The Techno-pedagogue must be familiar with synchronous tools to allow participants to connect at a single point in time. They are Jit.si, Google Meet, Microsoft team, Zoom.us, Skype. The Learning Management System (LMS) for the administration, documentation, tracking, reporting, automation, and delivery of courses are needed. Moodle, OpenEdx, Claroline, Sakai etc must be used for this purpose. A multi pronged strategy is necessary to manage the crisis and build a resilient Indian higher education system in the post covid era.

Key words: Disrupted, pandemic, e-learning, Digital platform, Pronged, Digital divide, Sustainability, Reuse, Capacity building.

INTRODUCTION

The human civilization has travelled much from an ‘animal of no significance’ to the ‘animal that becomes a God’ (Harari, 2015, 465-466). People started to manage resources since agricultural revolution. After the scientific revolution Covid 19 is the one of the most horrible attacks on humankind beside Second World War. The affluence of life and the society, the progress of education are at stake. The pandemic ceased human life in physical communication with man and materials. The 21st century life is usually marked by a ‘life of technological challenge’ with the ‘political challenge’. By 2050 the globe will be dominated by robots (Harari, 2018, 120-121). The pandemic accelerate the growth of machine, artificial intelligence and ICT in life, learning and work. Our learners are also set in 21st century where knowledge is constantly verifying and postulating due to rapid technological development. Digital literacy is assigned as one of the most essential skills of 21st learners. 21st century learners are familiar with substantial and constructive use of technology, interested to learn from multiple learning media. The present pandemic situation adds more progressive outlook on it. The present situation compels students to be more ICT centric. So, accumulating and using educational resources through digital means becomes one of the prime activities among all educational activities.

SCENARIO OF HIGHER EDUCATION IN INDIA

The present system of Indian higher education comprises of around nine hundred universities and thirty nine thousand colleges. Around 40% universities and 60% colleges are located in rural areas i.e., a large number of students are coming from rural India. 38% universities and 78% colleges are privately managed. GER in higher education is around 26%. Almost 67% students are coming out from the private institutions (MHRD, AISHE 2017-18). Our universities are set up in a teaching cum research institutions. A large amount of students choose distance education mode to complete their university learning. Besides it, there are various national and international platforms to provide online courses on various topics. So, the scenario of higher education in India is vast and diversified and setting mostly on conventional environment. Higher education in India is constantly in search of quality though it is

relative and dynamic in concept. Quality of higher education shapes the quality of life of a nation. Higher education should develop the life and employability skills among the students. Now we are moving towards interdisciplinary and multidisciplinary curriculum which demands for reading beyond destined circle. The curriculum will develop generic graduate skills among the learners.

POST COVID ERA OF HIGHER EDUCATION

Post Covid era accelerate a great dependency on E-learning. One of the major challenges in post Covid era is to overcome physical distancing in men and materials. Regular classrooms, visiting the libraries are obsolete idea now. Learners have to choose digital platform to read, download book, journals, images, data etc. In this context most fearful data arises that almost 90% India people are digitally illiterate. In the post-Covid era the students of higher studies are using webinar on different aspects of education such as paradigm shift in higher education to increase their knowledge on the present situation. They are using Google classroom, meeting or exchanging ideas on Google meet, live streaming of YouTube videos, sharing Google sheets and Google forms etc. They are also attending various International symposiums for exchanging views on different techniques and methodologies used to combat the situation. Actually they are in a learning mode to combat the situation through adopting ICT effectively. But a sudden shifting from the environment of conventional teaching learning to ICT enable teaching learning is not so easy to adopt and accommodate.

MAPPING EDUCATIONAL RESOURCES

The educational resources are used for both teaching and learning. There are eight distinct functional area of an institution like academic, infrastructure, personnel, finance, student service, linkage and interface with outside agencies, office management and leadership and managerial excellence (Mukhopadhaya, 2016, p 22). Academic management usually comprises of admission, curriculum, instruction, examination, co scholastic and co-curricular activities (Mukhopadhaya, 2016, p 65). Mapping or managing educational resources is usually falls under the section of academic management. A gradual shift from conventional resources to digital resources

like e-books, e-journal, research paper, downloading data and images is necessary regarding the present situation. A domain specific data and image should be incorporated for effective transmission of specified knowledge.

MANAGEMENT OF EDUCATIONAL RESOURCES

The term management is related to process or methodology. It stands for managing work scientifically that helps to grow significantly in positive direction. For proper management of the educational resources, it is necessary to be sustainable. Sustainability includes the idea of accomplishing goal in addition to longevity. The educational resources must meet its goals i.e. resources must be shared in a format that operates equally well across hardware and in operating system platforms. The resources must be sourced in such a way that local adaptations can be made. For proper management of resources we can mention three models for open educational resource projects in higher education; the MIT model, the USU model and the Rice model. We should look for resources that indicate structure of the domain; proper sequencing of the topics within the domain and the content should be structured accordingly. The textual content may be in HTML, XML and PDF format, the audio resources in MP3 format, windows media and real formats, videos may be in Quick time and MP4 formats, although simulation content is rare, they are generally developed in the Java or Flash format. For proper management of VLE/MLE we can use discussion forum, chat room, video conference, wiki, blogs etc. They could be monitored in a sophisticated manner and with a precise tracking system. In this context of resource management of VLE the teacher should use four quadrant approaches. The Quadrant-1 is e-tutorial. Here the video and audio content is shared properly. The Quadrant-2 is e-content; here PDF, text, e-books, illustrations, video demonstration etc. are given to students. The Quadrant-3 is web resources, topic related links, Wikipedia, development of course etc. are in the purview of this quadrant and the Quadrant-4 is the self-assessment of the students'. In the last Quadrant, we use problems and solutions, MCQs, matching questions etc. To manage educational resources more effectively we can follow the following steps.

- i) **Source:** First the learners have to know the different sources of collecting educational resources. Unless and until they are aware of the ICT resources they would not gain confidence in the present situation. Digital library of India is a collaborative project of over 21 institutions in our country and is currently hosted by IISC (Indian Institute Of Science) Bangalore. Here the students can access rare non copy righted books collected from various libraries of India. National digital library (NDL) is an initiative of IIT Kharagpur and aims to provide the students free access of digitized educational content in English and other Indian languages in a common platform. Students or research scholars can be benefitted from Shodhganga, the digital repository of Indian theses and dissertations, set up by INFLIBNET in 2010. Vidyanidhi, the open access Institutional repository is to cover scholarly publications covering journal articles, conference, book reviews, presentations etc. can be accessible by the students. Shodh Gangotri is a repository of Indian research which is in progress. The students of higher education can access from Consortium for Educational Communication (CEC) which is an inter-university center set up by the UGC. There is an open source educational initiative by the IIT Bombay named Project Ekalavya for content development in Indian languages. We can mention E-Gyankosh, a knowledge repository for storing, indexing, preserving, distributing and sharing the digital resources developed by the ODL institutes in India. **SWAYAM** provides online access to best teaching Learning sources are now can be viewed by any learner free of cost without any registration. It is the Government of India initiative with three cardinal principal of education policy access, equity and quality. E-Shodh Sindhu provides current as well as archival access to more than 15000 core and peer-reviewed journals and a number of bibliographic, citation and factual database in different disciplines from a large number of publishers and aggregators to its member institutions. Vidwan is a database of experts which provides information about experts to peers, prospective collaborators, funding agencies policy makers and research scholar in the

country. The teachers and learners of diverse disciplines such as science, commerce, social sciences, law, humanities are immensely benefitted by SWAYAMPRAKASH, a group of 32 DTH channels providing high quality educational curriculum based course contents. One more mentionable source is e-PG Pathshala, which is the initiative of UGC for providing free access to standardized e-text books for post graduate courses in different universities of the country. Besides it many universities and colleges have opened their library for all students. That means MHRD is offering multiple sources at free of cost to the learners to fight against the present circumstances. Educational institutions have a great responsibility to make aware of the students about those resources. Teachers should motivate their students that physical library may be closed but digital library is open now for us with 24x7 time frames.

- ii) **Students' accessibility:** The next step is students' accessibility. Learners need to access it through an individual login Id and password. As many students of remote villages are not familiar with online platforms so the institutions should help them to create an ID and password. They should guide them to access those resources. We should be very cautious of deprivation in accessing the resources. Online platform always has a basis in collaborative atmosphere. The inclusiveness for access must be there for the physically challenged students also. The higher education institute should try to provide laptops with screen readers and special e-content for the visually and hearing impaired group of students to integrate all the students. We should provide access to all including the most disadvantaged to bridge the digital divide. If we can cater the students' accessibility properly it can surely reduce regional disparities.

Save and reuse: They need to save the downloaded materials and reuse in future. In tune with the present situation we are also in a project of go green. The different types of reuses are As-is-reuse, Technical adaptations for reuse, Linguistic adaptations

for reuse, Cultural adaptations for reuse, Pedagogical adaptations for reuse. As-is - reuse, or making use of an educational resource without any modification or alternation, is the primary method of reuse among instructional designers and teachers using copy right -encumbered materials having no rights to make any modification. An open resource, incompatible with the local teaching and learning environment, technical adaptations is needed before using it. Linguistic adaptations to materials are the changes in the materials for different language speaking learners, according to learners need. Cultural adaptations for reuse are the crucial factor for reuse as in some cultures teamwork is the norm of learning whereas for other cultures this group learning is interpreted as academic dishonesty. Pedagogical adaptations for reuse is the few changes made by teachers to the resource to make it better fit according to teaching style.

CONCLUSION

The post pandemic environment has restricted our physical movement throughout the world. It affected life, learning and work. Simultaneously it closed the access of physical resources also. But we have to use open online resources to continue the education system throughout the world. UNESCO, UNDP and many other governmental as well as non-governmental organizations are working collaboratively to support the world. As the economy of a country is also dependent on the progress of higher education so we must cope up ourselves with the new adverse situation. The higher education should emphasis on employability of the youths besides acquiring knowledge. The educational resource should be managed properly as in our country the financial source is limited. The educational resources should be managed properly so that we can reach to a resilient India. But in that process we should be cautious that every student's accessibility must be ensured. Sustainability and inclusiveness must be ensured in management of educational resources unless a large amount of students would be left behind.

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