

Adoption of Open Learning Systems and MOOCS during Covid 19 by Academic Libraries

Ms. Amruta Kashelkar

Assistant Librarian
NMIMS Deemed to be University
Navi Mumbai India

Ms. Vishakha Naik Ramgir

Library Assistant
NMIMS Deemed to be University
Navi Mumbai India

***Abstract** - The entire world is going through covid 19 pandemic as a result every institution, industry has badly affected. In these challenging times, libraries have been gateways for accurate information & source of Knowledge for conducting research. This paper emphasizes the need for online learning platforms during covid 19. It also identifies the advocacy role taken up by libraries and library professionals. It traces the various digital platforms made available in India. This paper highlights the important projects carried out by Government of India for online learning. The paper also explores the challenges experienced during covid 19 and are transformed into opportunities.*

Keywords: Covid-19, MOOCS, Open Learning platforms, Pandemic, Library Resources, Academic Libraries

Introduction

The entire world has experienced the impact of Covid 19 on almost every aspect of life. The pandemic drastically interrupted the education and educational campuses, and institutions are closed. It has led to a shift in the paradigm of the education system towards open learning system. Libraries are also not the exception for using various platforms to provide resources. The covid 19 pandemic forces many libraries to make rapid changes in their Infrastructure, Day to Day functioning, and Services. The transition from Face to Face to offering remote services was a challenging task. Despite many difficulties, most educational institutions reacted positively and succeeded in continuing teaching-learning through online tools. The Open learning platforms have played a vital role in transforming physical collection to digital sources by providing user friendly places, instant access, and quality content. Online platforms have effectively been used to enhance collaboration, communication, and a sense of continuity between learners and teachers.

Objectives

1. Highlight the impact of Covid 19 on Academic Libraries
2. Enlighten various emerging learning tools beneficial for students and faculty fraternity.
3. Throw lights on various platforms used for open learning during Covid 19
4. How to overcome challenges posed by Covid Pandemic in Academic Libraries

Methodology

The literature review method has been adopted for collecting the information for this article. Various reports published by libraries on libraries' functioning during pandemic have referred for collecting data for the current study. The Government of India's effort to support online learning initiatives during pandemic has been collected from different websites. This study analyzes the path for using open learning resources available free of cost and ensure optimum utilization of these resources in academic libraries. The use of social media has increased the usage of the library during pandemic. The gathered data has been analyzed to study the effectiveness of online learning tools and how libraries can efficiently use them for our patrons.

Best practices carried out by libraries for open learning

24*7 Access of Library Resources-

Library Professionals will play with the upcoming ICT tools & unfold the info to the community. Library Professionals are giving Cloud-based Library Services, Authentication technologies: Remote Access, Electronic Resource Management System ERMs: CORAL, Discovery Services, Library Service Platform/ LibGuides /IRs, Advocating of OA resources. Library Professionals provide access to open sources, Open Course wares/OERs, Open Learning Resources, webinars, Virtual lecture rooms, ORCID, Citation generation through Mendeley, Zotero. All these resources are available 24*7 and can be accessed remotely.

Providing Services remotely

During the pandemic, many academic libraries strived hard to provide needed information, resources to their patrons. The Libraries, which already have a digital presence, have promoted their online services such as E-Books, E-Journals, Databases, Repositories, Etc. Librarians worldwide envisage institutions that will blend the physical mode with the digital, increasing their emphasis on their critical community role by providing additional services to patrons. The libraries are now working in a hybrid mode that means they are now investing their funds for building physical and online collections. Many libraries prefer digital collections such as E-books, subscriptions for case studies Etc. Some libraries are promoting open learning platforms such as Shodh Ganga, Shodh Sindhu, Sankhya, and DOAB; such open learning sources are playing phenomenal roles to cater to libraries' user needs. We at NMIMS started the Best Reads Service through which we have to send many best seller E-books to our users.

Availability of Open Learning platforms

Most academic institutes have conducted their lectures, Exams, and Other learning activities through online platforms such as (Microsoft Teams, Zoom, CiscoWebEx, Google Meet, Hangouts,) and web-based learning platforms (Elias, Moodle).

Unified communication and online learning platforms like Microsoft Teams, Google Classroom, courser, Zoom, student portals allow the instructor to create online courses, training and skill development programs, Quizzes, Online Tests. They usually support various formats like Word, PDF, Excel file, audio, videos, Etc. This software also allows tracking student

performance and assessment by using MCQ and the rubric-based assessment of submitted assignments.

Utilization of Social Media Platforms as a Digital Library

Many academic libraries have created their own Facebook pages, Blogs, Twitter handles, and so on. Many Librarians have provided their services through social media platforms during pandemic. The E-books, Comics have been provided to the school, college students to indulge them in reading. Many webinars, seminars, refresher courses, workshops, and library outreach programs have been organized by libraries using social media platforms. Many libraries received overwhelming responses for such programs.

Open Learning Platforms widely used during Covid 19

Swayam- The complete form of Swayam is Study Webs of Active- Learning of Young Aspiring Minds. Swayam provides online study material to students free of cost. It offers various online courses of different fields on a single platform along with certification. The repository hosts more than one lakh video lectures. It is the largest repository for engineering subjects. During Covid 19 period, swayam has started enrollment for more than 500 online certification courses offered through MOOC format. Nine coordinators work towards quality content, including AICTE, UGC, CEC, IGNOU, NPTEL, IIMB, NITTTR, NCERT, and NIOS. The swayam platform is classified into 4 parts- Printed reading material, Video lectures of expert faculty, Tests, quizzes for self-assessment, and an Online discussion forum.

Shodh Ganga- Shodh Ganga is a digital repository of E thesis and dissertations set up by INFLIBNET. It has a collection of more than 290,000 Thesis as of date. The repository has the functionalities of capturing, indexing, store, disseminate and preserve the Thesis submitted by researchers. The Shodh Ganga is an open-source platform available free of cost to the entire student community.

Vidwan-Vidwan is a database and network of premier researchers & Scientists working in leading academic Institutions. The portal provides information from experts to peers, funding agencies for research, and prospective collaborators. The subject experts' database helps appoint and select panel members, experts for a task force, and content creation and research.

Diksha-Diksha portal contains online courses for students and teachers lined up with school curriculum, including textbooks, assignments, and worksheets. It also provided assessment Aids, Training content in digital format. The Mobile App is also available for accessing the content.

NPTEL- The complete form NPTEL is National Programme on Technology Enhanced Learning. NPTEL is an Initiative of 7 IIT's and the Indian Institute of Science. This repository contains Video lectures of IIT and IIM's Professors consisting of Engineering and Science subjects. Students very effectively used this resource to update the Knowledge

UGC sets up CEC-Consortium for Educational Communication provides access to unlimited educational curriculum-based lectures free. It disseminates educational programs through broadcast and non-broadcast modes. It helps promote and experiment with a new technology that increases student outreach.

Vidya Mitra-It is an integrated portal for E contents developed by NME- ICT. Currently, there are more than 50 projects on E content.

Sakshat-It is an educational helpline designed by the Ministry of HRD. It is a one-stop portal to fulfill the needs of students, teachers, researchers, and lifelong learners. The portal offers various online courses along with the help of subject experts. The topics have been divided into four parts that are e-content, web resources, e-tutor, and self-assessment. It facilitates lifelong learning to users, especially during the lockdown period.

E Adhayan-E Adhayan is a platform, which provides 700+ E-books for post-graduate courses. MHRD has taken this initiative under its National Mission on Education through ICT (MNE-ICT) initiative. More than 22,000 modules of various subjects can be accessed by the student on the official website of e-Pathshala. Students can access e-Adhyayan, UGC MOOCs and e-Pathya.

DOAJ-DOAJ has started in 2003, which contains over 15 000 peer-reviewed open access journals containing subjects like science, technology, medicine, social sciences, arts, and humanities. These open access journals are available in all languages from all over the countries. The Database is financially supported by many libraries, publishers, and other organizations.

DOAB- DOAB is a discovery service for peer-reviewed open access books. The Database indexes and provides access to high-quality, open access, peer-reviewed books. OAPEN Foundation established this in 2012 with the Directory of Open Access Journals (DOAJ) & SemperTool.

E Yantra-E-Yantra is a robotics outreach project, an initiative of the Department of Computer Science and Engineering at the Indian Institute of Technology, Bombay. The Ministry of Education funds it, Government of India, under the National Mission on Education through ICT

National Digital Library of India

NDLI is the most prominent digital library in India. It is sponsored and mentored by the Ministry of Education, Government of India. NDLI is designed to hold any language content and provides interface support for the ten most widely used Indian languages. The repository supports all academic levels, including researchers and life-long learners, all disciplines, all popular forms of access devices, and differently-abled learners. It is developed, operated, and maintained by the Indian Institute of Technology Kharagpur. During Pandemic, NDLI has introduced three new features: study at home, Covid- 19 Research Repository, and featured collections.

Study at home - This section is divided into seven sub-sections or subjects like Engineering, Humanities, Law, and Management. It comprises learning materials for these subjects from school-level up to graduation and research.

Covid- 19 Research Repository- This section has dedicated to research material on Covid 19. It has a collection of Journals, scholarly publications, and information about research funding for Covid. It also includes information about start-up opportunities.

Featured collections- This section includes lectures and webinars given by renowned personalities, subject experts on popular topics. This section updates users about upcoming events of NDLI.

Followings are the helpful Digital Resources for libraries to provide valuable resources to patrons. These are the few digital initiatives taken up by different academic institutions.

| S. No. | Title / Name | Description | Web Address / URL |
|---------------|-----------------------|--|---|
| 1 | NDLI | Educational materials available for all subject areas like Technology, Social Science, Literature, Law, Medical, Etc. | https://ndl.iitkgp.ac.in/ |
| 2 | Internet Archive | Internet Archive: is a non-profit library of millions of free books, movies, software, music, websites, and More. | https://archive.org/ |
| 3 | Hathi Trust | HathiTrust is a partnership of academic and research institutions, offering a collection of millions of titles. They were digitized from libraries around the world. | https://www.hathitrust.org/ |
| 4 | World Digital Library | The World Digital Library provides free access to Manuscripts, rare books, maps, photographs, and other important cultural documents from all countries. | https://www.wdl.org/en/ |
| 5 | Khan Academy | Khan Academy non-profit educational organization. It Provides short lessons in the form of videos. | https://www.khanacademy.org/ |
| 6 | Open Library | Open Library is an open-source web page. For every book ever published. | https://openlibrary.org/ |
| 7 | Project Gutenberg | Project Gutenberg is a volunteer effort to digitize and Archive cultural works. | https://www.gutenberg.org/ |

Challenges in Pandemic

Library Professionals face entirely different challenges worldwide than services providers. Therefore, thanks to handling this stuff of internet, ranging from minimal restrictions to complete closure. Many supposed Libraries, a bit like the National Library of an Asian country, city libraries, and other regarded libraries worldwide, are affected. Because of internment conditions and are poignant the whole community of researchers, students, scholars, readers, Etc.

Shutting down libraries features an incredible impact on the communities that we tend to serve. University & school Libraries, college libraries are also closed. Many competitive

exams and educational exams are still unfinished; thus, Library professionals will help users; they need data through the digital platform. It has been attributed to feeling from traditional to unhappy, stressed, confused, and scared/angry during a crisis. For Library Professionals, the most crucial challenge to cope with these conditions throughout this internet & interact with the whole community during the pandemic. The professionals should create a healthy atmosphere to bridge the gap between the libraries and their users.

Challenges tackled by the library professionals during Covid 19

- By following the government tips, Library Professionals will break the coronavirus chain likewise gives varied services remotely.
- Collect the factual Knowledge & convert it into valuable data, facilitating the whole community of varied fields accurately.
- Interact with the whole Community through Social media and organize the Reading Books challenge, Poster writing competitions, ability development program, Etc. That has helped folks manage traditional life antecedently and develop skills that will reduce their stress throughout the difficult time of this pandemic.
- We tend to be aware that Central & state governments are creating several decisions and applying completely different approaches to serve higher. Library Professionals will publish all the info through Social Media Platforms.
- To provide data resources to users - "Different kinds of services, collections can be coupled along and provide access on electronic platforms."
- Give the libraries facilities for the users underneath the proper government tips & Human interest.
- Library Professionals will play an important role to serve the entire community

Easing of Penalty Rules

The library has extended the date for all types of reading materials issued to all users until its reopening. Simultaneously, many libraries have revived thousands of books published before internment to avoid penalties to students.

Challenges for library staff working in-house

Some library workers who knew and willing to work as essential are operating within the library. They maintain social distancing and take additional measures like wearing masks and gloves to safeguard themselves, keep library premises hygienic, follow social distancing norms, quarantine the return books, and handle the library collection carefully. These in-house hygiene practices, starting libraries according to the new standard, is a tricky task.

Many Librarians are still working remotely; thus, they require a laptop, high bandwidth internet, and electricity to provide remote services to patrons. Many of the library professionals are not tech-savvy and well versed with remote technology. For them, it is challenging to cope up with new technology within a shorter period.

Another challenge is that some employees do not have internet or high-speed affiliation reception. They either buy a web service out of their pocket, purchase a modem or router from a store, or acquire a hotspot device from the IT department once it had been on the market. While using Wi-Fi at home, there will be a restriction on it.

With some members of the family sharing the same web at the same time. For a supervisor, it is hard to deploy job responsibilities to his/her subordinate. Libraries cannot carry out each of their functions remotely.

Without coaching and readiness beforehand, some library employees do not know to access Microsoft outlook off-campus. Employee saved their related documents and shared network files on their workplace computers. It is challenging to provide IT support promptly as the support team's results have been powerless, with several workers getting right down to communicate with many workers at the same time. While adopting new normal many library employees are facing frustration due to various problems such as not having the power to transmit and receive emails from outlook, not familiar with new technology or new version of windows, compatibility issue. These technical difficulties are affecting library staff's ability to work efficiently. Few employees prioritize not receiving a cheque in hand due to the affected ability of not activity their job as they usually do. The limitation of working at home will increase the job responsibility of staff. Similarly, library colleagues not having easy access to collaborate, for networking, and to meet with each other which has projected to their negative emotional feelings like isolation, anxiety, uncertainty, and stress.

Challenges for digital library services and users

- Through online learning mode students have faced questions related with the library offerings they need been using. The only common problems are the place to return the check-out material, including computer systems and the way to renew objects that have surpassed due dates. Now a days the library offerings digital collections to students. It shows that gaining access to and using library offerings can solely be realized in digital formats antagonistic to face-to-face.
- In the digital world, all types of libraries are growing an in-depth range of digital services to satisfy purchasers' requirements from numerous backgrounds.
- Like many educational libraries, attractive school and college students with digital library services are challenging. With the outbreak of COVID-19, the stage of challenges posted to digital libraries and customers are rising more significantly thanks to the very fact of the subsequent motives the library has experienced.
- Librarians need great coaching as they are not used to unexpected or sudden changes. Though in-person assistance was once the first communication approach, suddenly shifting all physical to the digital collection is difficult.
- When physical sources grow to be unavailable, or the supply is restricted, the necessity for having access to and therefore the usage of e-resources may additionally find individual higher. Nevertheless, not all scholars are familiar with utilizing a few library search structures to get the needed resources. Accessing e-resources off-campus individuals can expand the challenge because information that they need to be configured desirable beforehand.
- Collaboration with tutorial departments and administrative gadgets on joint projects for digital initiatives can face challenges. The previous technique and method for collaborative tasks also cannot work with all the modifications suddenly happening.

Financial Support Issue

Financial support is one of the challenges that face e-learning projects. Many of the schools or educational institutes have limited resources and have an outsized deficit.

- Spending longer on virtual platforms will leave kids vulnerable to online sexual exploitation.
- Learners from low-income families and deprived teams area unit tons of seemingly to suffer throughout online learning. They are not going to afford high-speed internet association and needed technical gadgets. It widens the gap between privileged and unprivileged learners. It is going to cause laziness with some students being at their home and can lack self-discipline.
- The environment of a face-to-face meeting is lost. Social relationships between students and academics or between students could hamper.
- The protection of personal Knowledge is additionally compromised jointly will hack the digital devices while not latest code updates and antivirus programs.

Conclusion

This study has outlined various impacts of Covid-19 on the higher education sector in India. The paper analyzes the critical issues and factors that influence the digital learning process's adoption during Covid-19. It has paved the way for a drastic change in pedagogy, teaching approaches, and hybrid education at all education levels. As we cannot predict how long the pandemic situation will continue, a gradual move towards hybrid/virtual learning demands the coming time. Digital Library is in additional demand during this reasonably pandemic situation. Libraries have an important role to play by offering different online tools and study material to users. Library Professionals need to do all the things like quick access to information is a vital prerequisite, create digital platforms, training programs for accessing online learning tools, Etc. The social responsibility of library professionals is to supply data access to the users.

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