
**NATIONAL DIGITAL LIBRARY OF INDIA: AN ACCESS TO SCHOLARLY
COMMUNICATION IN HIGHER EDUCATION IN INDIA**

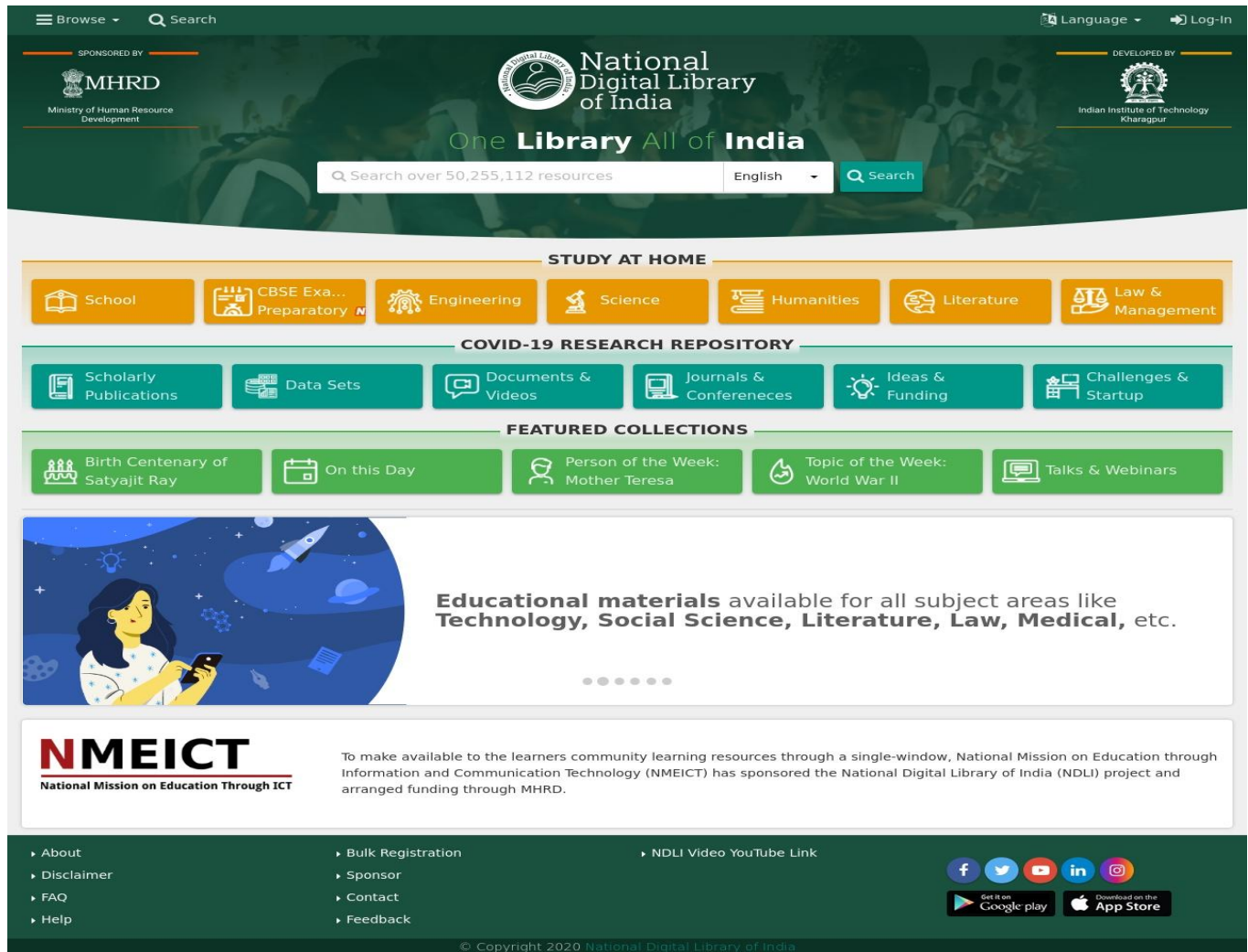
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ABSTRACT:

Universities and research institutes in higher education have played a leading role in transforming the country into a modern industrialized and technologically-advanced state. The National Digital Library of India (NDLI) is a National Mission on Education through Information and Communication Technology (NMEICT) project developed by the Indian Institute of Technology, Kharagpur to develop a virtual repository framework with a single-window search facility to provide support for all academic levels, including researchers, life-long learners and differently-abled learners; all disciplines; and all popular form of access devices. Further, It is designed to help students preparing for competitive and general examination and to enable people from all over the world to learn and prepare from best practices and to facilitate interlinked research from multiple sources National Digital Library of India, 2020. The portal of National Digital Library of India (NDLI) was used to collect data for various types of text content. After filtering text content, have been analyzed in MS Excel. This research paper focuses on various value-added services of NDLI delivers to the researchers in the country. Further, this paper discusses the various benefits, access options and limitations of NDLI

INTRODUCTION:

National Digital Library of India (NDLI) pilot project was initiated by the Ministry of Human Resource Development (MHRD) under its National Mission on Education through Information and Communication Technology (NMEICT) to develop a virtual repository framework with a single-window search facility. It holds a wide variety of lectures, courses, books, journals, archives in various media forms curated, collected and created by the best institutions of the country. It is a 'customized service' in an 'integrated environment' to serve users requirement 24x7. 2 crore items were hosted in NDL India repository, out of which 40 lakh are books and has a collection of 1.26 crore articles (Falak, 2018). This project developed at IIT Kharagpur (Das, 2018). Contents are available in different varieties like text, audio and video etc. Users are free to choose and retrieve their required information in the desired format. It harvests information from various sources and directs its users to their respective information. It collects and collates metadata from leading learning institutions in India and abroad as well as other pertinent sources (Government launches National Digital Library of India, 2018). Therefore, the responsibility of the content lies with the source organization, not with NDL. For registered members, access to the NDL portal is free. The NDL India comprises contents in several languages and provides learning and research interface support for the leading Indian languages (National Digital Library of India, 2019). It is developed to provide support for all academic levels, including researchers and life-long learners, all disciplines, all popular form of access devices and differently-abled learners. The NDL India has collaborated with libraries in Indian educational institutions, public libraries as well as major international libraries to get access to books on a wide range of subjects.



(Fig.1)

OBJECTIVES:

- To find out various scholarly resources in the Repository
- To find out the type of access mode to the contents
- To overview on various benefits to the scholars' community
- To find out the limitations of the Repository

SCHOLARLY RESOURCES IN DIFFERENT SUBJECT DOMAINS:

The following scholarly resources are more useful in the Higher Education Institutions (HEIs). These resources including Video, Audio, Scholarly articles and e-books, research reports etc,

Table.1

Engineering	Science	Humanities	Literature	Law & Management
Common Subjects	Common Subjects	General	Study of English Literature	Management
Aerospace Engineering	Agriculture	History	Study of Hindi Literature	Law
Architecture	Atmospheric Science	Geography	Learn Sanskrit	
Chemical Engineering	Biology & Biotechnology	Sociology	Learn Urdu	
Civil Engineering	Chemistry &	Economics	Literary Works in	

	Biochemistry		English	
Computer Science & Engineering	Computer Science	Psychology	Study of English Literature	
Electrical Engineering	Environmental Science	Political Science	Study of Hindi Literature	
Electronics & Communication Engineering	Mathematics	Education	Learn Sanskrit	
Mechanical engineering	Nanotechnology	Constitution and Law		
Mining Engineering	Physics	Philosophy		
Ocean Engineering	Common Subjects	Mass Communication		
Textile Engineering		Library Science		
		Music		
		Film Studies		

COVID-19 Research Resources Repository (Scholarly Publications):

These are publications in high-quality peer-reviewed journals/conferences collected from publishers' are available in the NDLI under the caption of COVID-19 Research Resources Repository;






Table.2

Name of resources & Its No.(Publications (37,348 resources)	Papers (30,591 resources) Search with coronavirus OR covid-19 OR 2019-ncov OR sars-cov OR mers-cov OR HCoV
ACM Digital Library [COVID-19] (24 resources)	ACM: (5,069 resources)
Cambridge University Press (CUP) [COVID-19] (337 resources)	Cambridge University Press: (283 resources)
Cell Press [COVID-19] (31 resources)	Cell Press: (400 resources)
ChemRxiv [COVID-19] (383 resources)	IEEE Xplore: (567 resources)
Elsevier [COVID-19] (1,081 resources)	JAMA Network: (477 resources)
Emerald [COVID-19] (52 resources)	Nature: (1,576 resources)
IEEE [COVID-19] (390 resources)	New England Journal of Medicine:(203 resources)
JAMA Network [COVID-19] (264 resources)	Oxford University Press: (4,327 resources)
LitCovid [COVID-19] (2,500 resources)	PubMed: (3,171 resources)
Mendeley [COVID-19] (3,883 resources)	SAGE Journals: (2,733 resources)
Nature [COVID-19] (50 resources)	Springer Nature: (185 resources)
Open Science Framework (OSF) [COVID-19] (835 resources)	Taylor-and-Francis: (3,864 resources)
Oxford Academic Journal [COVID-19] (2,067 resources)	The Lancet: (392 resources)
PubMed Central [COVID-19] (3,048 resources)	WHO database: (6,907 resources)
PubMed [COVID-19] (864 resources)	Wiley Online Library: (437 resources)
Research Square [COVID-19] (513 resources)	ACM: (5,069 resources)
SAGE Journals [COVID-19] (188 resources)	Cambridge University Press: (283resources)

Social Science Research Network (SSRN) [COVID-19] (761 resources)	
Science [COVID-19] (28 resources)	
Scopus [COVID-19] (117 resources)	
Semantic Scholar [COVID-19] (12,193 resources)	
SpringerNature [COVID-19] (42 resources)	
Taylor & Francis [COVID-19] (228 resources)	
The Lancet [COVID-19] (241 resources)	
The New England Journal of Medicine [COVID-19] (93 resources)	
Web of Science [COVID-19] (147 resources)	

ACCESS MODES:

Table.3

	Open Full-text available to all:(Example: NCERT)
	NDL Users: Full-text available through NDL, not directly from Source (Example: South Asia Archive)
	Limited Access: Part of text available but full-text requires authorization by Source authority (Example: IISER, Bhopal)
	Restricted: Full-text access requires authorization by Source authority and separate login to the Source (Example: IIT Jodhpur)
	Subscribed: Full-text available from institutions that have subscribed to the Source (Example: Springer)

(Fig.2) (Sutradhar, B (2018))

NDL India provides the following benefits to its users;

1. It provides as a single-window search facility to users.
2. The NDL India supports to different kinds of users like students (from primary to post-graduate levels), researchers, library users, teachers, librarians, professionals, differently-abled users and all other lifelong learners.
3. It provides access to several learning resources like books, articles, theses, manuscripts, video lectures, web courses, etc. in multiple formats like PDF, HTML, DOC, PPT, JPG, GIF, MP3, MP4, FLV, AVI, etc.
4. The available resources can assessable through APP, and other embedded social media sites Linkdin, Facbook, Facebook, Twitters etc.
5. Scholarly Contents are available for different subject domains: Arts and Humanities, Social Sciences, Technology, Natural Science etc.
6. Support to harvest metadata and contents from all the Institutional Digital Repositories (IDR) of Universities and Institutions and index its main server.
7. It has the facility of different ways to browse content Repository: Browse by source, Browse by content type, Browse by
8. It has the facility to access the content through APP in three different languages: Hindi, Bengali and English.

LIMITATIONS:

1. Lack of Interactivity, Vernacular support as compared at international level
2. Low integration between content and learning system
3. Weak ecosystem between learners and teachers
4. Responsibility for Contents are not lies with NDLI.

5. Technological Obsolescence due to fast-growing technologies
6. Several digitization issues i.e extraction of text from unstructured data
7. No uniform hardware and software Standards
8. Copyright issues are not clear for various models collaborated with other repositories.

CONCLUSION:

ND India is evolved one of the largest digital Repository in the world. It impacts on higher education, and it is required to do more accessible by enhancing the Indic languages. NDL India is a digital knowledge source of the Nation – catering to immersive e-Learning for all learners at all levels in all areas with the access of 24X7. Undoubtedly, NDL would contribute to the research in turn to national development and economy.

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