NDLI: A Catalyst for Educational Advancement Through Digital Repositories, Preservation, and Community Engagement

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Abstract: The National Digital Library of India (NDLI) is an innovative initiative that provides a single-window platform for accessing a diverse range of learning resources, promoting e-learning and education nationwide. This article outlines the key features, advantages, and primary services of NDLI, including its Institutional Digital Repository (IDR) hosting services, Digital Preservation Centre, and NDLI Club program. The analysis of 42 institutions partnering with NDLI to host their IDRs reveals a diverse mix of institutions, varying content quantities, and a growing trend of adoption over time. By providing access to high-quality educational resources, promoting digital literacy, and preserving India's cultural and scientific heritage, NDLI is poised to play a crucial role in shaping the nation's education landscape.

Keywords: National Digital Library of India (NDLI), Institutional Digital Repository (IDR), Digital Preservation Centre (DPC), NDLI Club, Digital Heritage Preservation, Collaborative Learning.

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I. INTRODUCTION

Libraries and repositories of knowledge are treasure troves of information that support education, research, and the overall development of humanity. They are built because of the availability of information assets in physical and accessible forms, mainly in print, which makes them location-bound and time-constrained. As a result, learners cannot access library resources at any time, from anywhere.

Advances in technology have facilitated the availability of knowledge resources as electronic content over the past several decades. Electronic content can now be accessed from anywhere without boundaries, thanks mainly to the INTERNET. Furthermore, advancements in software and content management have made e-content accessible with merely a sensor and a click, allowing for organised presentation in desirable manners. Due to the proliferation of such digital techniques and facilities, the concept of libraries has undergone a significant transformation. Digital library projects are emerging globally, including in India.(Muniyandi, 2021)

Students benefit greatly from digital libraries and portals in their academic pursuits, and they have a positive view of these resources. They can now easily access, search, and retrieve electronic resources — a task that used to be tedious. However, this process often leads to missing highly sought-after electronic resources, despite their availability. As a result, the technological tools meant to support education and research are being used only partially and inefficiently.

National Digital Library of India (NDLI)

India's National Digital Library (NDLI) is an online hub for educational resources, offering a range of services to the learning community. It's more than just a digital library – it's a platform for exploring and discovering electronic resources.

Launched by the Ministry of Education, Government of India, and developed by the Indian Institute of Technology Kharagpur, the National Digital Library of India (NDLI) is a groundbreaking initiative. As a cornerstone of the National Mission on Education through Information and Communication Technology (NMEICT), NDLI provides a unified platform with a vast array of learning resources, making e-learning and education accessible to all.(National Digital Library of India (NDLI), n.d.)

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II. ORIGINS OF NDLI

The NDLI was established through a joint effort between the Ministry of Education and NMEICT. Its primary objective was to create a digital library of learning resources with a single search feature, catering to learners across the country. The pilot project, NDLI Phase I, began in April 2015 and ended on September 30, 2017.

A. Phases of Development

The NDLI project has gone through multiple development phases.

- NDLI Phase I (April 2015 September 2017): The initial phase focused on developing a digital library portal.
- NDLI Phase II (October 2017 March 2021): The second phase expanded the project's scope, enhancing the platform's features and resources. Due to the COVID-19 pandemic, this phase was extended until March 31, 2021.
- NDLI Phase III (April 2021 March 2026): This phase focuses on further developing and expanding the platform's capabilities to ensure continued access to highquality educational resources.

B. National Launch

On June 19, 2018, the NDLI portal (https://project.ndl.gov.in/products/ndli-web-portal/) was officially launched, marking a significant milestone in the project's progress. Since its launch, NDLI has become a vital resource for students, educators, and researchers nationwide, providing access to a diverse range of digital resources and promoting e-learning and education.

C. Key Features

NDLI's platform offers several key features, including:

- A single-window search facility: This unified search interface lets users access a wide range of learning resources.
- Diverse learning resources: The platform hosts a variety of digital resources, such as textbooks, research papers, videos, and more.
- Accessibility: Built to be accessible on multiple devices, users can access resources anytime, anywhere.

By providing a single platform for accessing learning resources, NDLI has revolutionised education in India. With ongoing development and expansion, NDLI is poised to play a pivotal role in shaping the country's educational landscape.

D. Key Features and Benefits

The National Digital Library of India (NDLI) is an innovative platform designed to bridge the knowledge divide by providing universal access to educational resources. Through the use of digital technology, NDLI consolidates learning materials from multiple sources, creating a comprehensive and inclusive digital repository. This initiative promotes a culture of lifelong learning, allowing individuals from diverse backgrounds to access high-quality educational materials and resources.

India's National Digital Library (NDLI) provides a vast repository of educational resources covering multiple subjects and academic levels. It features content from various national and international sources, including books, articles, theses, video lectures, and Open Educational Resources (OERs).

> Access to a Wide Range of Resources

NDLI offers over 100 million items in 39 Indian languages, covering a wide range of topics including literature, science, mathematics, engineering, and medicine. This extensive collection includes textbooks, research papers, lecture videos, audiobooks, simulations, fiction, and academic articles. The platform's search feature lets users filter materials by subject, author, and publication date, making it easier to find relevant resources.

➤ Support for Multiple Languages

Our platform offers an interface in 15 popular Indian languages, making resources more accessible to a wider audience. This feature benefits students who prefer learning in their native language. For instance, students can access materials in Hindi, Bengali, Tamil, and other languages, promoting inclusivity and diversity in education.

➤ Inclusive Learning

NDLI is designed to cater to users at all levels of education, including those with disabilities, ensuring it works well with various digital devices and platforms. The platform's accessibility features help users with disabilities navigate and use resources effectively. For example, the platform offers text-to-speech functionality, allowing users with visual impairments to access resources.

E. In-Depth Analysis

The impact of the National Digital Library of India (NDLI) on education within the country can be examined from various perspectives. Primarily, the platform has broadened accessibility to high-quality educational resources, particularly benefiting students residing in rural and underserved areas. Furthermore, the platform's multilingual capabilities have promoted inclusivity and diversity in educational opportunities, allowing students to engage with learning materials in their native languages. Lastly, the platform's accessibility features have ensured that users with disabilities can access resources, thereby fostering equal opportunities in education.

F. Impact on Education

The NDLI has significantly impacted education in India. The platform has improved access to quality educational resources, especially for students in rural and underserved areas. Its multi-lingual support has fostered inclusivity and diversity by enabling students to learn in their native languages.

The platform's accessibility features have enabled users with disabilities to access resources, promoting equal opportunities in education. The platform's vast repository of educational resources has made it possible for students to access quality learning materials from

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III. MAJOR SERVICES

A. NDLI BOOK Club:

Empowering Education through Digital Resources: The NDLI Club Initiative

NDLI Club is a pioneering initiative that brings together people who are passionate about using digital resources for learning. By promoting a community-based approach, the club fosters collaboration, knowledge sharing, and skill development among its members.

> Unlocking Opportunities

As a member of the NDLI Club, individuals can tap into a wealth of benefits, including:

- Community Engagement: Engage with like-minded individuals, educators, and researchers who share a passion for digital education.
- Digital Literacy: Enhance your skills and knowledge through workshops, seminars, and training sessions.
- Resource Access: Get access to a vast collection of digital resources, including educational materials, research papers, and more.
- Collaborative Learning: Engage in knowledge-sharing activities and joint projects that foster innovation and excellence.(NDLI: NDLI Club, n.d.)

➤ A Platform for Growth

The NDLI Club is a welcoming platform that embraces individuals from various backgrounds and educational institutions. By becoming members, individuals can:**

- Develop Professional Skills: Enhance your professional development through networking opportunities, workshops, and training sessions.
- Stay Informed: Keep up with the newest trends in digital education and research.
- Support Educational Growth: Take part in initiatives that promote educational advancement and digital literacy.
- Build Connections: Membership in the NDLI Club provides opportunities to network with experts, fostering collaboration, knowledge sharing, and career development.

➤ Aligning with National Objectives

The NDLI Club supports the National Education Policy 2020 (NEP 2020) and the Digital India Mission, encouraging the use of technology to enhance education. By joining the club, members can contribute to achieving the country's educational goals. (https://ndl.iitkgp.ac.in/club)

B. IDR Hosting Services:

NDLI provides Institutional Digital Repository (IDR) services to academic institutions across India. To date, NDLI has helped establish over 42 IDRs, enhancing the digital infrastructure of these institutions. The IDR service allows institutions to create, manage, and share digital assets, promoting knowledge creation and collaboration.

> NDLI's Collaborative Initiative: Promoting Knowledge Sharing

India's National Digital Library (NDLI) is dedicated to promoting knowledge creation, collaboration, and sharing nationwide. To achieve this goal, NDLI has formed partnerships with various institutions and organisations. Through this collaboration, institutions can tap into NDLI's expertise and resources to create, manage, and share their digital assets.

➤ Benefits of Collaboration

Partnering with NDLI offers institutes several advantages:

- Enhanced Digital Presence: NDLI provides a dedicated public URL for the institution's Institutional Digital Repository (IDR), making it more accessible to a broader audience
- Greater Visibility: Institutes can showcase their copyrightfree content to a broader audience through NDLI's repository, enhancing the visibility and reach of their research and academic work.
- Technical Support: NDLI offers hosting and infrastructure support, including setting up DSpace and providing storage space, to help institutes manage their digital assets effectively. (https://ndl.iitkgp.ac.in/idr)

➤ Key Aspects of Collaboration

NDLI's collaboration with institutes encompasses several key aspects:

- Dedicated Hosting: NDLI offers a dedicated URL for each institute's IDR, making it easy for users to access the repository.
- Content Sharing: Institutes can share their copyright-free content with NDLI, which will be included in the NDLI repository for broader distribution.
- Metadata Management: NDLI supports institutes in managing metadata for their digital assets, ensuring the content is discoverable and accessible.

➤ *Objectives of the Collaboration*

The main goals of the collaboration between NDLI and institutes are::

- Promote Reading and Research: Cultivate a culture of reading and exploration among students, scholars, and institutions.
- Foster Collaboration: Encourage teamwork and knowledge sharing among institutions, researchers, and academics.
- Expand Access to Knowledge: Make knowledge and research outputs more available to a broader audience, supporting the country's knowledge ecosystem.

Partnering with NDLI enables institutes to benefit from digital knowledge sharing, enhance their digital presence, and contribute to the country's educational and research objectives.

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The National Digital Library of India (NDLI) is currently supporting DSpace for hosting Institutional Digital

Repository (IDR) services. Here's a list of institutions utilising this service.

Table 1: Institutional Digital Repository (IDR)- List of Institutions

Sr. No.	Institute Name	place	Year	URL	Content count
1	Indira Gandhi National Open University (IGNOU)	Delhi	01/06/2017	https://ignou.ndl.gov.in	50
2	National Law University and Judicial Academy	Aasaam	01/06/2017	https://dlnluassam.ndl.gov.in	703
3	Centre for Women's Development Studies (CWDS)	Delhi	01/04/2018	https://cwds.ndl.gov.in	323
4	Maulana Abul Kalam Azad Institute of Asian Studies (MAKAIAS)	Kolkata, West Bengal	01/04/2018	https://makaias.ndl.gov.in	792
5	Presidency University	Kolkata, West Bengal	11/04/2018	https://presiuniv.ndl.gov.in	1160
6	Sarvodaya Trust	Karnataka	2018-12-31	https://sarvodaya.ndl.gov.in	425
7	CRY India Repository	Mumbai, Maharashtra	17/07/2019	https://cry.ndl.gov.in	172
8	Dispur Law College	Dispur, Aaasam	05/02/2020	https://dlc.ndl.gov.in	868
9	Nagaland University	Nagaland	03/02/2020	https://nagalanduniv.ndl.gov.in	500
10	Indian National Science Academy (INSA)	Delhi	01/06/2020	https://insa.ndl.gov.in	2095
11	AIKTC Central Library	Navi Mumbai, Maharashtra	25/04/2023	https://aiktc.ndl.gov.in	3077
12	Government General Degree College Salboni (GGDCS)	West Bengal	11/06/2024	https://ggdcs.ndl.gov.in	175
13	Banwarilal Bhalotia College	Aasansol	12/08/2024	https://bbcollege.ndl.gov.in	0
14	Cotton University	Aasam	05/09/2024	https://cottonir.ndl.gov.in	9
15	Central University of Karnataka	Karnataka	21/09/2025	https://cuklibrary.ndl.gov.in	610
16	New Town Ramakrishna Mission, Viveka Tirtha	West Bengal	26/09/2024	https://rkmvivekatirtha.ndl.gov.in	1
17	Government College of Arts, Science, and Commerce	Goa	01/10/2024	https://khandolacollege.ndl.gov.in	127
18	S. S. Girls' College Gondia	Gondia, NagpurMaharashtra	07/11/2024	https://ssgc.ndl.gov.in	12
19	Sister Nibedita Government General Degree College for	Kolkata, West Bengal	22/11/2024	https://snggdcg.ndl.gov.in	880
20	Rosary College of Commerce and Arts, Navelim	Salcete, Goa	12/11/2024	https://rcca.ndl.gov.in	143
21	Shahid Matangini Hazra Government General Degree College for Women	Kulberia, West Bengal	18/12/2024	https://matanginicollege.ndl.gov.in	76
22	Prajyoti Niketan College	Puducad, Kerala	01/01/2025	https://prajyotiniketan.ndl.gov.in	281
23	Mother Theresa Institute of Engineering and Technology	Andra Pradesh	02/01/2025	https://mtieat.ndl.gov.in	1
24	Shyampur Siddheswari Mahavidyalaya	Hawarah, West Bengal	02/01/2025	https://ssm.ndl.gov.in	651
25	Government General Degree College Lalgarh	Lalgarha, West Bengal	07/02/2025	https://ggdcl.ndl.gov.in	333

26	MES College of Arts & Commerce - Goa	Ijorshi, Goa	10/02/2025	https://mescollege.ndl.gov.in	37
27	Government General Degree College Pedong	Kalimpong, West Bengal	12/02/2025	https://ggdcp.ndl.gov.in	261
28	S.B.S. Government College, Hili	Dakshin Dinajpur, West Bengal	17/02/2025	https://sbsgch.ndl.gov.in	0
29	Women's Christian College	Kolkata, West Bengal	18/02/2025	https://wcck.ndl.gov.in	25
30	Siliguri College	Silipuri, West Bengal	24/03/2025	https://siliguricollege.ndl.gov.in	1
31	Himachal Pradesh National Law University	Shimala, Himachal Pradesh	02/04/2025	https://hpnlu.ndl.gov.in	120
32	Maitreyi College	Delhi	01/05/2025	https://maitreyi.ndl.gov.in	2
33	Parimal Mitra Smriti Mahavidyalaya	Jalpuri, West Bengal	2025,-05-02	https://pmsm.ndl.gov.in	0
34	Bankura Sammilani College	Bankura, West Bengal	14/05/2025	https://bsc.ndl.gov.in	15
35	P.E.S.'s Ravi S. Naik College of Arts & Science	Farmagudi, Goa	16/05/2025	https://pes.ndl.gov.in	6
36	Central Tribal University of Andhra Pradesh	Marriyalasa, Andhra Pradesh	28/05/2025	https://ctuap.ndl.gov.in	49
37	Indira Gandhi National Centre for the Arts (IGNCA)	Delhi	01/06/2025	https://ignca.ndl.gov.in	60
38	Ghoksadanga Birendra Mahavidyalaya	Cooch Bihar, West Bengal	03/06/2025	https://gbm.ndl.gov.in	36
39	University of Engineering and Management (UEM), Kolkata	Kolkata, West Bengal	14/07/2025	https://uemk.ndl.gov.in	325
40	Netaji Subhash Chandra Bose Memorial, Govt. College Hamirpur	Himachal Pradesh	14/07/2025	https://nscbm.ndl.gov.in	138
41	Pandit Deendayal Upadhyaya Central Library, Central University of Haryana	Mahendragarh, Haryana	01/08/2025	https://cuh.ndl.gov.in	0
42	DAV College, Jalandhar	Jalandhar, Panjab	11/08/2025	https://davjalandhar.ndl.gov.in	0

> Institutional Digital Repository (IDR) Data

➤ Analysis of Institutional Digital Repository (IDR) Data
The table shows information about 42 institutions that
have partnered with the National Digital Library of India
(NDLI) to host their Institutional Digital Repositories (IDRs).
Here's an analysis of the data:

- Wide Range of Institutions: The list encompasses universities, colleges, research centres, and organisations across India, highlighting the diverse institutions participating in the NDLI initiative. There are 16 institutes from West Bengal, five from Delhi, four from Goa, three from Maharashtra, two from Assam, one each from Punjab and Haryana, two from Andhra Pradesh, two from Himachal Pradesh, one from Nagaland, and two from Karnataka. My institute, S. S. Girls' College, Gondia (Maharashtra), is also included.
- Content Count: The number of contents in each IDR exhibits significant variation, ranging from 0 to 3077.
 Institutions such as AIKTC Central Library and the Indian

National Science Academy (INSA) possess a substantial volume of content. Conversely, institutions like Banwarilal Bhalotia College and S.B.S. Government College, Hili, have limited or no content. The aggregate content count is 14,539.

- Year of Participation: Institutions have been part of the NDLI initiative from 2017 to 2025, with a noticeable increase in participation in recent years.
- Geographical Distribution: Institutions from various states across India are represented, such as West Bengal, Delhi, Maharashtra, Karnataka, and others.
- > Trends and Insights:
- Widening Adoption: More institutions are joining the NDLI initiative every year, reflecting a growing awareness of the value of digital repositories.
- Variation in Content Count: The considerable variation in content count among institutions may stem from factors such as the type of institution, research focus, or how effectively their digital repositories are managed.

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• Regional Representation: The list includes institutions from various regions, fostering diversity and inclusivity in the digital repository initiative.

Analysis reveals the diverse range of institutions participating in the NDLI initiative and the varying amounts of content in their digital repositories. The data sheds light on how Indian institutions are adopting and implementing digital repositories, highlighting the opportunities for knowledge sharing and research collaboration.

C. Digital Preservation Centre (DPC):

➤ Preserving India's Cultural and Scientific Heritage

The National Digital Library of India (NDLI) has made a significant contribution to protecting the country's rich cultural and scientific heritage by establishing a Digital Preservation Centre. This centre has played a key role in digitising and making available a wide range of valuable resources. (NDLI: Digital Preservation Centre, n.d.)

➤ Digitization Efforts

Notable examples of the centre's digitisation efforts include:

- Historical Records: Digitising the Presidency College Register, which lists graduates from 1858 to 1925, provides a fascinating glimpse into the institution's history.
- Literary Treasures: The centre has also digitised rare literary works, including journals and books, making them accessible to researchers and scholars.
- Scientific Contributions: Digitising the Bengali science journal "Jnan O Bijnan" (1948-2020) highlights the contributions of Indian scientists and researchers in the field of science.
- Collaborations and Partnerships: The centre is working with various organisations to digitise and preserve their valuable resources, fostering collaboration and knowledge sharing.

➤ Promoting Access to Knowledge

By preserving and providing these resources, NDLI enhances access to knowledge and supports the country's cultural and scientific growth. The Digital Preservation Centre plays a crucial role in protecting India's rich heritage for future generations. (*NDLI: Digital Preservation Centre*, n.d.) (http://ndl.iitkgp.ac.in/dpc)

IV. RECOMMENDATIONS

NDL India is a national-level digital repository initiative. It benefits users of all kinds worldwide. To ensure that digital information is stored, preserved, and shared effectively, similar initiatives should be set up at state, district, and local levels. The central and state governments should lead these efforts and provide necessary funds and resources to establish such projects.

V. CONCLUSION

NDL India is one of the largest digital repositories globally, offering information on any topic in multiple languages and formats, accessible to users at any time, from anywhere. Users can personalise their experience based on factors like education level, language, content difficulty, and medium. This 24/7 service enables learners to quickly and easily find the right resources. Given India's diverse multilingual population and geography, achieving the goal of "Education for all" presents many challenges. NDL India plays a key role in addressing these challenges. (Bashir et al., 2019)

India's National Digital Library (NDLI) has emerged as a pivotal player in the country's education sector, offering access to high-quality educational resources, promoting digital literacy, and preserving the nation's rich cultural and scientific heritage. Through its hosting services, Digital Preservation Centre, and NDLI Club initiative, NDLI fosters a culture of lifelong learning, empowers individuals, and drives the country's educational objectives. As NDLI expands its scope and reach, it is poised to have a profound impact on India's education system, promoting inclusivity, diversity, and educational excellence.

REFERENCES

- [1]. Bashir, B., Nasreen, N., & Loan, F. A. (2019). National Digital Library of India: An overview. *Library Philosophy and Practice*, 2019(August 2020).
- [2]. Muniyandi, D. (2021). A Case Study on the National Digital Library of India and Exploring A Case Study on the National Digital Library of India and Exploring Learning Resources for School Education Learning Resources for School Education deivam muniyandi A Case Study on the Na. Library Philosophy and Practice, November, 1–19. https://digitalcommons.unl.edu/libphilprac
- [3]. National Digital Library of India (NDLI). (n.d.). Retrieved September 15, 2025, from https://ndl.iitkgp.ac.in/
- [4]. *NDLI: Digital Preservation Centre*. (n.d.). Retrieved September 15, 2025, from https://ndl.iitkgp.ac.in/dpc
- [5]. *NDLI: NDLI Club.* (n.d.). Retrieved September 15, 2025, from https://ndl.iitkgp.ac.in/club