

# Digital Infrastructure for Knowledge Sharing – DIKSHA: A Review

Sanjoy Kar

Institute of Development Studies Kolkata, 27/D, DD Block, Sector-I, Salt Lake City, Kolkata, West Bengal, INDIA.

## ABSTRACT

DIKSHA (<https://diksha.gov.in/>) is a digital platform launched by NCERT and MHRD to improve school education in India. It offers a range of interactive content, e-books, and assessment tools in 32 languages. DIKSHA has been designated "One Nation, One Digital Platform" and is built using open-source technology. It has been extensively used during the COVID-19 pandemic and has over 168 million course enrolments and 137 million course completions. The platform is designed to be flexible and evolving, with various solutions tailored to meet the requirements of individual states and UTs. Diverse disabled individuals (Divyang) can navigate the website without difficulty.

**Keywords:** DIKSHA, Digital Infrastructure, NCERT, Open Educational Resources, One Nation, One Digital Platform, Open Educational Resources, OER, Open and Affordable Textbooks, OAT.

## Correspondence:

**Sanjoy Kar**

Institute of Development Studies Kolkata,  
27/D, DD Block, Sector-I, Salt Lake City,  
Kolkata-700064, West Bengal, INDIA.

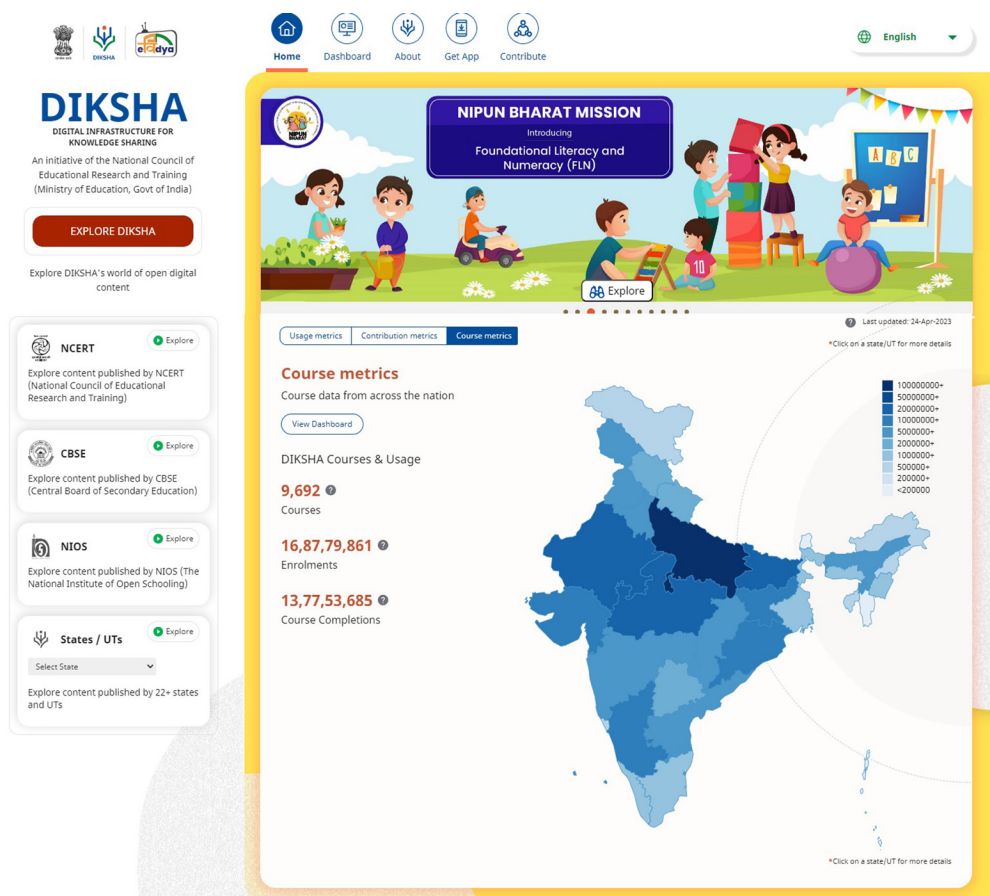
Email: sanjoykar007@gmail.com,  
sanjoy@idsk.edu.in

<https://orcid.org/0000-0001-5050-5945>

**Received:** 02-05-2023;

**Revised:** 18-06-2023;

**Accepted:** 27-07-2023.



DOI: 10.5530/jcitation.2.2.21

## Copyright Information :

Copyright Author (s) 2023 Distributed under  
Creative Commons CC-BY 4.0

**Publishing Partner :** EManuscript Tech. [[www.emanuscript.in](http://www.emanuscript.in)]



## INTRODUCTION

The 'Digital Infrastructure for Knowledge Sharing' or 'DIKSHA' (<https://diksha.gov.in/>) is a digital platform launched in 2017 by NCERT and MHRD to improve school education in India. It aims to provide access to a wide range of interactive contents, explanatory videos, quizzes, assessments, and e-content, including e-textbooks of NCERT and other boards, which are mapped with QR codes. The portal and mobile app are created by the Ministry of Education (MoE), Govt of India and it is intended to assist individual states and school boards in exercising their autonomy, and freedom in order to design and implement educational programs that are tailored to their requirements and help them realize their objectives. The platform is built on the fundamental cornerstones of open architecture, open access, open licensing, preference, and autonomous functioning. The contents can be accessed by teachers, students, and parents across the country. The tagline of DIKSHA is "One Nation, One Digital Platform".

DIKSHA is available in 32 Indian languages, and presently covers grades 1-12. The platform is flexible and evolving, with various solutions designed based on the needs of different states and UTs. The platform is designed to integrate with TV and radio, and anonymized data generated from DIKSHA provides stakeholders with the ability to implement data-driven interventions. The platform is continuously expanding and includes content from NCERT, CBSE, NIOS, NROER, SCERTs and e-Pathshala, making access to these resources easier for everyone. DIKSHA policies and tools enable educationists, organizations, and institutions, including government, non-governmental, and private organizations, to engage in, contribute to, and use a single platform in order to accomplish learning goals at scale for the country. The NCERT textbooks are licensed under the CC BY NC-ND license, whilst all of the other resources on the platform are licensed under the CC BY NC-SA license.

The Indian Government is dedicated to making education accessible to everyone, regardless of their location or socio-economic status. The aim is to provide equal learning opportunities to students at all levels of education, even in remote areas of the country. The goal is to ensure that the ease of accessing services with the help of technology is not limited to only the wealthy class (3). According to the NEP 2020 (clause 2.60), the digital platform DIKSHA will have a collection of high-quality educational resources that will help students improve their reading, writing, and mathematical abilities. In addition, the NEP specifies (clause 23.60) that several groups would produce digital instructional materials in regional languages, which will then be uploaded on the DIKSHA platform. This platform also has the capability of being utilized to train teachers using various digital resources. In order to better support DIKSHA and other educational initiatives that are centered on technology, the organization CIET will be improved. However, in order for educators to effectively incorporate e-learning resources into

their lessons, schools will be required to supply them with the necessary technology.

DIKSHA has been designated as "One Nation, One Digital Platform" as part of the PM eVidya initiative that is being carried out by the government of India. It is built using open-source technology, more specifically MIT licensed Sunbird, which provides more than one hundred microservices that may be utilized as building blocks in the creation of systems and services. The Honorable Prime Minister of India inaugurated the National Digital Education Architecture (NDEAR) in the month of July 2021. This architecture supplies the building blocks necessary for the construction of federated and interoperable computer networks by the individual states and territories. Energized books, online courses, creating materials, content sourcing, interactive quizzes, question papers, AI chatbots, analytics, and dashboards are just some of the successful use-cases that have been made possible by the fundamental building blocks of DIKSHA, which make up the majority of NDEAR building blocks.

During the COVID-19 pandemic, the platform was extensively used for school lockdowns, and innovative programs and ideas were explored (Sharma, 2021; Mahapatra, & Sharma, 2021). DIKSHA was developed as a collaborative environment that uses open standards and is accessible to a wide variety of users, including educators, students, content partners, government officials, non-governmental organizations, etc.

In addition, DIKSHA provides Children with Special Needs (CWSN) with a broad selection of audio books, videos in Indian Sign Language (ISL), as well as a dictionary, in order to facilitate the teaching and learning processes. As of April 24th, 2023, DIKSHA has 9692 courses, 16,87,79,861 course enrolments, and 13,77,53,685 course completions. The platform has received 2,43,444 contributions from a total of 11,624 individuals. The DIKSHA app has been regarded as one of the top-rated free educational apps on India's Google Play Store since May of 2020.

In my opinion, the DIKSHA portal is a great resource for fostering cooperation and information exchange in the Indian schooling system. The website is well-designed as per the Guidelines for Indian Government Websites (GIGW). The website is accessible to persons with various disabilities without any barriers. The portal is user-friendly and loaded with study materials for students of various skill levels. The gateway features two distinct themes: classic and joyful. The portal gives learners the opportunity to customize their search by Board (such as NCERT or NIOS), Medium (English, Hindi, Bengali, etc.), Grade Level (Preschool to Class XII), and Subject (Biology, Chemistry, Physics, History, etc.). In addition to scanning the QR code, users can also use the text search or address bar to locate the necessary content. The portal is mobile-friendly, so both students and educators can access and utilize the system regardless of their

physical location or the device they are using. The fact that the DIKSHA site is available at no cost means that students from all walks of life can take advantage of its many benefits. The portal's inclusive layout and multilingual content make it easy to use by a wider range of people. You can view statistics about your courses, your contributions, and how often you use the platform. By traversing the map and data, anyone may see the nationwide and state-by-state consumption pattern. The report is revised every Monday at noon. It's important to note that everything in DIKSHA is released under a Creative Commons Attribution 4.0 International License.

The user interface of the DIKSHA portal may present a challenge to individuals who are accessing it for the first time, particularly given that children comprise a significant portion of its users. The website's layout can be cluttered and confusing, making it challenging to locate the desired resources. It is essential to note that the quality of the content available on the DIKSHA portal can vary. Some resources may be outdated, leading to potential confusion and misinformation among learners. Additionally, the platform does not provide personalized learning experiences, which could limit its effectiveness in promoting knowledge exchange. Certain subjects and topics may not be covered, and

the content available may not be suitable for all learners. Given these limitations, it is important for educators and learners to carefully evaluate the DIKSHA portal before incorporating it into their learning experiences. The quality and accuracy of the content should be taken into account, and its ability to meet the unique needs of learners should be assessed.

In conclusion, the DIKSHA portal is an excellent platform that has the potential to revolutionize digital education in India. It provides a wealth of learning resources that can help teachers and students to enhance their knowledge and skills. Overall, I would highly recommend the DIKSHA portal to anyone who is interested in promoting digital education and knowledge sharing in India.

## REFERENCES

- Mahapatra A, Sharma P. Education in times of COVID-19 pandemic: Academic stress and its psychosocial impact on children and adolescents in India. *International Journal of Social Psychiatry*. 2021;67(4):397-9.
- Remote Learning Initiatives Across India. (2021). India Report on Digital Education 2021. Department of School Education and Literacy. Ministry of Human Resource Development, Government of India, New Delhi. Available at-[https://www.education.gov.in/sites/upload\\_files/mhrd/files/irde\\_21.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/irde_21.pdf)
- Sharma A. Education through ICT Initiatives during the Pandemic in India. 2021;42. ICT India Working Paper.

**Cite this article:** Kar S. Digital Infrastructure for Knowledge Sharing – DIKSHA: A Review. *Journal of Data Science, Informetrics, and Citation Studies*. 2023;2(2):143-5.