

Empowering Life-long Learning in India: The Role of Library Professionals and OER in the 21st Century

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ABSTRACT

In the present knowledge-based society, life-long learning has emerged as an essential component for personal growth, professional success, and the sustainable development of society at large. In India, the use of Open Educational Resources (OER) along with digital technology is changing the way people access quality education, especially beyond the limits of traditional classrooms. Library professionals have an important role in this change. They work as guides, resource providers, and educators in the modern learning environment. This paper discusses how library professionals in India support life-long learning by helping people use OER platforms such as the National Digital Library of India (NDLI), SWAYAM, NPTEL, e-PG Pathshala, and others started by the Ministry of Education (formerly known as MHRD). It also focuses on their role in improving digital literacy, selecting and organizing useful content, and ensuring that learners from different backgrounds can access educational resources easily.

Keywords: *Open Educational Resources (OER), Life-Long Learning, E-Learning, National Education Policy, Library Professionals*

INTRODUCTION

In today's fast-changing world, learning throughout life is very important for personal, professional, and social development. Life-long learning means gaining knowledge and skills continuously not only during school years, but at every stage of life. In India, the government is encouraging this through digital education and free learning materials called Open Educational Resources (OER). OER are freely available and openly shared study materials that anyone can use and access. Platforms such as SWAYAM, NPTEL, e-PG Pathshala, and the National Digital Library of India (NDLI), supported by the Ministry of Education, are helping to make learning easier and more accessible, especially in rural areas. Library professionals play a key role in this system. They help people find, understand, and use these online learning resources effectively. Today's librarians are not just in charge of books, they are also teaching guides who support life-long education. This paper looks at how Indian librarians are helping make education more open and inclusive in the 21st century.

Objective

The main objective of this study is to explore and highlight the vital role of library professionals in promoting life-long learning in India through the effective use of Open Educational Resources (OER). It aims to:

1. Understand the concept and importance of life-long learning in the 21st-century Indian context.
2. Examine various OER platforms like SWAYAM, NPTEL, e-PG Pathshala, and NDLI initiated by the Government of India.
3. Analyze how library professionals support and guide users in accessing and utilizing OER for continuous learning.
4. Identify challenges faced by librarians in this digital shift and suggest ways to enhance their role in the learning ecosystem.
5. Emphasize the need for training and professional development of library staff to meet the demands of the digital age.

LITERATURE REVIEW

The concept of life-long learning has become very important in recent years, especially due to globalization, rapid growth of technology, and the rise of knowledge-based economies. According to UNESCO (2016)^[16], life-long

learning is necessary to build inclusive and sustainable societies. It helps people keep up with changes by encouraging them to keep learning new skills and gaining knowledge throughout their lives.

In India, the National Education Policy (NEP) 2020 supports flexible learning, digital education, and life-long access to knowledge. This policy has helped to include Open Educational Resources (OER) and technology into the education system. Research by Perryman & de los Arcos (2016)^[1] and Kanwar et al. (2010)^[2] shows that OER make education more equal by removing cost and access barriers. This makes OER very useful for promoting life-long learning, especially in developing countries like India.

India has introduced several major OER platforms such as SWAYAM, NPTEL, e-PG Pathshala, and the National Digital Library of India (NDLI). These platforms give free and flexible access to high-quality learning materials. Mishra (2017)^[3] states that such platforms are important for self-learning and support both formal (school-based) and informal education.

Library professionals have a very important role in this system. Earlier, librarians were mainly seen as keepers of books, but now they are becoming guides who help people improve their digital skills and access knowledge. Today's librarians need to learn digital skills such as content management, digital curation, and user education to support the use of OER. Indian researchers have also shown that librarians are increasingly helping users find and use open access resources and digital platforms.

There are still some challenges. These include poor infrastructure, the digital divide between urban and rural areas, lack of training for librarians, and low awareness among users. Many experts believe that special training programs and support from institutions are necessary to help librarians make the best use of OER.

Studies show that both OER and library professionals are key to promoting life-long learning in India. With the right training, technical support, and strong policy backing, libraries can become powerful centres for inclusive and continuous learning in the 21st century.

Promoting Life-long Learning in India

Life-long learning in the Indian education system is becoming increasingly important in today's knowledge-based and technology-driven society. It refers to the ongoing process of learning at all stages of life, beyond traditional schooling, and includes both formal and informal ways of acquiring knowledge and skills.

In India, the National Education Policy (NEP) 2020 strongly supports the idea of life-long learning by promoting flexible learning paths, skill-based education, and the use of digital platforms. Government initiatives like SWAYAM, NPTEL, and the National Digital Library of India (NDLI) offer free and open access to quality educational resources for learners of all ages.

This approach is especially important in a diverse country like India, where people from different regions and backgrounds need equal opportunities to learn and grow. Life-long learning helps bridge the educational gap, supports employability, and encourages continuous personal and professional development. It empowers individuals to adapt to change, stay relevant in the job market, and contribute meaningfully to society.

OER in Indian Education System

Open Educational Resources (OER) are teaching, learning, and research materials that are freely available for use, sharing, and modification. In the Indian education system, OER play a crucial role in promoting accessible, affordable, and inclusive education for all.

The Government of India, through the Ministry of Education (formerly MHRD), has launched several OER initiatives to support digital and life-long learning. Key platforms include SWAYAM (for online courses), NPTEL (technical and engineering content), e-PG Pathshala (postgraduate learning materials), and the National Digital Library of India (NDLI). These platforms provide free access to quality content in multiple languages and subjects, making learning more flexible and inclusive, especially for students in remote or rural areas.

OER in India align with the goals of the National Education Policy (NEP) 2020, which emphasizes the use of technology and open resources to ensure equity and excellence in education. By supporting self-paced learning and lifelong education, OER are helping transform the Indian education system into a more learner-centric and digitally empowered ecosystem.

How OER Supports Life-long Learning

Table 1: OER support area in Life-long Learning

Sl. No.	Support Area	Description
1	Free and Open Access	OER are available at no cost, removing financial barriers to education.
2	Flexible Learning	Learners can access content anytime, anywhere, and learn at their own pace.
3	Self-directed and Personalized Learning	Allows individuals to choose topics and paths that suit their personal goals.
4	Skill Development and Career Advancement	Offers up skilling opportunities through MOOCs, videos, tutorials, etc.
5	Bridging the Digital Divide	Helps underserved areas access quality education through digital platforms.
6	Inclusive and Equitable Learning	Supports learning for all, including marginalized groups, in an open format.

OER and life-long learning are deeply interconnected. OER makes learning democratic, inclusive, and continuous. It empowers individuals to take charge of their learning journey and keeps them updated in a fast-changing world. In India, with support from initiatives under the Ministry of Education, OER is playing a crucial role in building a knowledge-rich and future-ready society. To maximize the potential of OER, awareness, digital access, and support from educators and library professionals are essential.

Role of OER in Life-long Learning: Contribution of Major Indian OER Initiatives

Open Educational Resources (OER) are central to promoting life-long learning in India by offering free, accessible, and quality educational content to diverse learners. These resources support self-paced learning, skill development, and knowledge enhancement beyond traditional classrooms. The Government of India, through various agencies, has developed several OER platforms that are crucial for fostering a culture of continuous learning. Below is the role of key Indian OER initiatives in promoting life-long learning:

1. National Digital Library of India (NDLI)

NDLI is a digital repository containing millions of resources in multiple languages and formats. It supports learners of all age groups by providing access to books, articles, theses, and multimedia resources, enabling self-learning and research support. Essential Facts about NDLI^[7]:

- 80 million registered users
- 100 million+ resources in 39 Indian languages
- 4,000+ institutional clubs
- 1.7 million club members

2. National Mission on Education through ICT (NMEICT)^[8]

This mission aims to leverage ICT for enhancing the quality of education. It provides digital content, teacher training, and development of online platforms that support life-long learning across disciplines.

3. National Programme on Technology Enhanced Learning (NPTEL)^[5]

NPTEL offers video and web-based courses in engineering, sciences, and humanities by premier institutions like the IITs and IISc. Learners, especially working professionals and students, can use it to upgrade their knowledge and skills. Key features of NPTEL:

- 34.5 million enrollments
- 6.4 million exam registrations
- 4.1 million certifications since 2013

4. SWAYAM (Study Webs of Active–Learning for Young Aspiring Minds)

SWAYAM offers MOOCs on a wide range of subjects for school, college, and working professionals. Its flexibility and certification options promote upskilling and continuous education. Important Insights of SWAYAM^[9] are:

- 11,772 courses offered
- 1.21 crore registered users
- 4+ crore enrollments
- 9.15 lakh exam registrations
- 6.5 lakh certificates issued

5. Swayam Prabha

SWAYAM PRABHA, launched by the Ministry of Education, is a group of 40 DTH channels broadcasting educational content 24x7. It provides curriculum-based programs, skill courses, and enrichment content for students, teachers, and lifelong learners. Designed to bridge the digital divide, it benefits rural learners lacking reliable internet access.

6. Consortium for Educational Communication (CEC)

CEC ^[10] provides educational video lectures and e-content in undergraduate subjects, supporting higher education and self-learning in the arts, commerce, and sciences.

7. DIKSHA (Digital Infrastructure for Knowledge Sharing)

DIKSHA ^[11] is a national platform for school education that offers interactive content for students and training modules for teachers, enhancing foundational and professional learning.

8. Shodhganga

A digital repository of Indian theses and dissertations maintained by INFLIBNET, it supports research scholars, educators, and advanced learners by providing open access to scholarly work.

9. Open Government Data (OGD) Platform

This portal provides access to government datasets for research, innovation, and informed learning, promoting data literacy and analytical skills.

10. National Open Access Policy Repository (NOPR)

Managed by CSIR, NOPR offers access to research papers and journals, supporting research-based learning and knowledge sharing.

11. e-PG Pathshala

Developed for postgraduate students, this platform offers high-quality content in social sciences, humanities, and natural sciences. It supports advanced learners and academic enrichment.

12. e-Gyankosh

An IGNOU initiative, e-Gyankosh archives course materials for distance learners. It helps adult learners and working professionals access academic content anytime.

13. Spoken Tutorial

Developed by IIT Bombay, it provides tutorials on software and programming in various Indian languages. It aids technical skill development for students and professionals.

14. OSCAR (Open Source Courseware Animations Repository)

This platform is an MHRD initiative that offers free, interactive animations for science and engineering subjects. It helps students understand complex concepts through visual learning.

15. National Science Digital Library (NSDL)

NSDL serves as a comprehensive digital repository of science and technology resources, encouraging scientific literacy and life-long interest in STEM subjects.

16. Virtual Labs (V-Lab) ^[14]

It is an initiative by the MHRD that provides simulated science and engineering experiments through computers or mobile devices. These virtual experiments function like real lab activities but do not require physical tools or equipment. Students can access them anytime, from anywhere, making learning flexible and convenient.

17. National Knowledge Portal

It acts as a one-stop digital platform that provides access to a wide range of educational and research resources developed by various Indian government agencies and institutions. It is designed to support students, teachers, researchers, and life-long learners.

These OER platforms collectively create a strong ecosystem for life-long learning in India. By offering diverse, multilingual, and accessible educational content, they empower learners from all walks of life to continuously upgrade their knowledge and skills. They also help reduce educational inequality, bridge the urban-rural divide, and support the objectives of the National Education Policy (NEP) 2020. Library professionals play a key role in guiding users to these resources, making them essential facilitators of this digital learning revolution.

Challenges and Future Directions of OER in Life-long Learning in India

Table 2: Challenges and Future Directions of OER in Life-long Learning in India

Challenges	Future Directions (Solutions)
1. Lack of Awareness and Visibility Many learners, especially in rural areas, are unaware of OER platforms like SWAYAM, NDLI, or NPTEL.	1. Capacity Building and Training Regular workshops to train librarians and educators on OER use, digital literacy, and information services.
2. Digital Divide Unequal access to digital devices, internet, and electricity hinders participation in online learning.	2. Infrastructure Development Investment in internet connectivity, mobile devices, and digital labs, particularly in rural and semi-urban regions.
3. Limited Training for Library Professionals Many librarians lack training in digital tools, licensing, and content curation.	3. User-Centric Library Services Libraries should offer services like OER discovery tools, digital helpdesks, and personalized user support.
4. Language and Accessibility Barriers OERs are mostly in English or Hindi, limiting access for regional users and those with disabilities.	4. Localization and Multilingual Content Create and promote OER in local languages and accessible formats for diverse learners.
5. Quality Control and Standardization Some OER materials lack academic quality and consistency.	5. Strong Policy Support National policies should define and support the use and quality assurance of OER in academic and public libraries.
6. Low Motivation and Recognition Library professionals often lack rewards or acknowledgement for their role in lifelong learning.	6. Recognition and Incentives Provide awards, promotions, and credits to motivate professionals in OER promotion and use.
	7. Collaborative Initiatives Encourage collaboration between librarians, educators, content creators, and policymakers for better outreach and resources.

Empowering life-long learning through OER requires the active participation of library professionals, strong institutional support, and inclusive digital access. By addressing existing challenges and adopting forward-looking strategies, India can build a robust, learner-centric educational ecosystem aligned with the goals of the National Education Policy (NEP) 2020 and the vision of a knowledge-based society.

CONCLUSION

In the 21st century, learning throughout life is very important for personal, professional, and social development. It is no longer just an option, it is a need. Open Educational Resources (OER) help make this possible by providing free, flexible, and easy access to good learning materials for everyone. In India, government platforms like SWAYAM, NPTEL, NDLI, e-PG Pathshala, DIKSHA, and others are helping people learn anytime, anywhere—outside of traditional classrooms. Library professionals play an important role in this change. They are no longer just in charge of books. Today, they help people use digital learning tools, find the right OER, and learn how to use them. They help make sure that learning is open and equal for all. The National Education Policy (NEP) 2020 supports this idea. It wants to create an education system that is flexible, inclusive, and based on technology. NEP 2020 promotes online learning, skill development, and access to education for everyone, including those in rural and remote areas. It also recognizes the role of libraries and librarians in supporting life-long learning.

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BIOGRAPHY



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