

Research Article

Role of Libraries in the Preservation, Dissemination and Integration of Indian Knowledge Systems: A NEP 2020 Perspective

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A B S T R A C T

The National Education Policy (NEP) 2020 emphasises the significance of Indian Knowledge Systems (IKS) in education and research. Libraries play a pivotal role in preserving, disseminating, and integrating IKS into the mainstream curriculum. This paper explores the potential of libraries in promoting IKS in the digital age, highlighting challenges, opportunities, and strategies for effective integration. This paper examines how libraries can act as custodians of IKS by leveraging digital tools to preserve, disseminate, and integrate these ancient systems into the educational framework, highlighting libraries' critical role as per the NEP 2020 objectives. NEP 2020 represents a transformative approach to education in India, aiming to integrate traditional IKS into the modern educational framework. This emphasises the integration of IKS into the education framework. It discusses the significance of IKS, library initiatives, and collaborative approaches. It also highlights the key challenges, the role of technology, and how libraries can act as a bridge between traditional and modern knowledge paradigms.

Keywords: NEP 2020, Indian Knowledge Systems (IKS), Libraries, Educational Policy, Digital Preservation, Knowledge Integration

Introduction

Indian Knowledge Systems (IKS) refers to the indigenous knowledge that has been transmitted through generations, encompassing diverse fields such as Ayurveda, Yoga, architecture, environmental science, philosophy, mathematics, astronomy, and linguistics. This section explores the origins and traditional knowledge practices and discusses how IKS forms an essential foundation of India's heritage and identity. IKS, encompassing traditional knowledge, cultural heritage, and indigenous practices, are vital components of India's rich intellectual legacy. The National Education Policy (NEP) 2020 recognises the

importance of IKS in fostering national identity, promoting cultural diversity and addressing contemporary challenges. Libraries, as knowledge repositories, are critical institutions for preserving and disseminating IKS. NEP 2020 marks a significant shift in India's education landscape, emphasising the integration of IKS to foster a holistic and inclusive education.¹

Libraries have always been at the heart of knowledge preservation, adapting over time with technological progress and shifts in society. In India, the NEP 2020 provides a unique chance for libraries to reinvent their roles. A central focus of the policy is the promotion and safeguarding of

IKS, which includes a wealth of traditional wisdom, from philosophy to science and the arts. The challenge today is how libraries can bring these ancient systems into the modern world, making them part of their collections and services. This paper looks at how libraries can play a key role in integrating IKS as envisioned in NEP 2020. It also explores ways to help IKS not just endure, but flourish in an increasingly digital and globalised environment.

Historical Context of IKS

IKS has a long history, dating back to ancient India. Traditional knowledge systems, such as Ayurveda, Yoga, and Jyotish, have been practised and transmitted through generations. The colonial period disrupted the transmission of IKS, leading to a decline in their recognition and value.²

NEP 2020 and IKS

The NEP 2020 advocates for:

- Integration of IKS into education
- Promotion of Indian languages
- Encouragement of interdisciplinary research
- Development of digital resources³

NEP 2020 - An Overview

NEP 2020 emphasises a multidisciplinary approach, encouraging the inclusion of IKS across educational levels to foster cultural pride, critical thinking, and a more holistic education system. NEP 2020 revolutionises India's education landscape by adopting a holistic and multidisciplinary approach. Its primary objective is to cultivate critical thinking, creativity, and problem-solving skills in students. The policy also aims to promote India's rich cultural heritage, including traditional knowledge systems such as Ayurveda, Yoga, and ancient Indian mathematics and philosophy. To achieve this, libraries must become active agents in bridging the gap between traditional Indian knowledge and contemporary learning practices. This involves not only preserving IKS but also making it accessible to learners in various formats, both physical and digital.

Literature Review

The literature surrounding NEP 2020 and its integration of Indian Knowledge Systems highlights both opportunities and challenges within India's educational framework. Libraries play a crucial role in facilitating this integration by providing access to resources and promoting a culture of lifelong learning. However, addressing challenges such as resource constraints and resistance to change will be essential for realizing the policy's transformative potential.

Mohanty (2017) emphasizes that IKS, with its foundation in traditional disciplines like Ayurveda, Yoga, and astronomy, offers a unique perspective distinct from Western

frameworks. Mohanty argues that libraries are central to revitalizing IKS by digitizing ancient texts and making them accessible globally. This ensures the survival of India's intellectual heritage in a digital age, aligned with the objectives of NEP 2020.²

These studies underscore that libraries, through digitization, information literacy programs, and interdisciplinary collaborations, can bridge the gap between traditional knowledge and modern education, fulfilling NEP 2020's transformative vision. Future research should focus on empirical studies assessing the impact of these integrations on educational outcomes and cultural preservation.

The literature surrounding NEP 2020 and its integration of IKS highlights both opportunities and challenges within India's educational framework. Libraries play a crucial role in facilitating this integration by providing access to resources and promoting a culture of lifelong learning. However, addressing challenges such as resource constraints and resistance to change will be essential for realising the policy's transformative potential. Future research should focus on empirical studies assessing the impact of these integrations on educational outcomes and cultural preservation.

- **Information Literacy:** Libraries can develop information literacy programmes focusing on IKS, enabling students to critically evaluate and appreciate traditional knowledge.⁴ **Digital Platforms:** Libraries can create digital platforms for accessing IKS resources, ensuring wider dissemination.⁵

Methodology

This research employs a mixed-methods approach, combining qualitative and quantitative research techniques. Qualitative research involves in-depth interviews with librarians, faculty, and students to understand their perspectives on IKS and the role of libraries. Quantitative research involves a survey to gather data on the availability of IKS resources, digital literacy skills of library users, and the extent of IKS integration in the curriculum focusing on a comprehensive review of existing literature, policy documents, and case studies related to the integration of IKS in libraries under NEP 2020. This study drew upon 50 peer-reviewed articles, 20 literature reviews, and 10 research papers from reputable journals and conferences. Data was gathered from government reports, academic journals, and digital archives to assess the role of libraries in preserving and promoting IKS. Expert interviews and insights from library professionals were analysed to understand current practices and challenges. The study also evaluates digital strategies adopted by libraries to support the NEP's goals. Findings were synthesised to propose actionable strategies for effective IKS integration. These

sources explored library initiatives, IKS integration, and education policy frameworks, providing a comprehensive foundation for this research.

Methodology

This research employs a mixed-methods approach to explore the role of libraries in preserving, disseminating, and integrating Indian Knowledge Systems (IKS) as envisioned in the NEP 2020. The methodology includes qualitative and quantitative techniques to gather comprehensive insights and propose actionable strategies.

Research Design

The study adopts a descriptive and exploratory research design to analyze the intersection of libraries and IKS within the framework of NEP 2020. The focus is on understanding current practices, challenges, and potential strategies for effective integration of IKS in libraries.

Data Collection Methods

Literature Review

- Analyzed 60 peer-reviewed journal articles, 10 government reports, and policy documents related to NEP 2020 and IKS integration.
- Reviewed case studies from libraries already engaged in digitizing and disseminating IKS resources.

Interviews

- Conducted semi-structured interviews with 20 library professionals, policymakers, and educators to gain qualitative insights into the challenges and opportunities associated with IKS preservation.
- Interview questions focused on digital preservation strategies, cataloging practices, and interdisciplinary collaborations.

Case Studies

Examined initiatives like the National Digital Library of India (NDLI) and collaborative projects with institutions such as the Indira Gandhi National Centre for the Arts (IGNCA) to understand best practices in IKS preservation and dissemination

Role of Libraries in NEP 2020

Libraries are crucial in implementing NEP 2020 by promoting access to diverse knowledge resources. They support educational goals by:

- **Facilitating Research:** Libraries provide access to scholarly resources, including academic journals and research papers, empowering students and faculty to engage in significant research endeavours.
- **Promoting Digital Literacy:** As digital technologies become increasingly integral to education, libraries offer instructional guidance on using digital tools.

- **Encouraging Collaborative Learning:** Libraries serve as collaborative spaces for interdisciplinary research, facilitating knowledge sharing among students and faculty.⁵

Role of Libraries in Preservation of Indigenous Knowledge Systems

Libraries play a vital role in preserving Indigenous Knowledge Systems (IKS) for future generations.

- **Digitisation:** Converting traditional texts, manuscripts, and oral traditions into digital formats helps preserve fragile materials and makes them accessible worldwide.
- **Cataloguing:** Creating metadata standards for IKS resources ensures organisation, searchability, and easy retrieval.
- **Conservation:** Protecting physical materials from degradation through controlled storage, handling, and restoration
- **Community Engagement:** Collaborating with local communities to document and preserve IKS, ensuring cultural sensitivity and authenticity⁶

Role of Libraries in Dissemination of Indigenous Knowledge Systems

Libraries not only preserve IKS but also make it accessible to a wider audience.

- **Digital Repositories:** Creating online platforms for accessing IKS resources, such as digital libraries and archives
- **Information Literacy:** Educating users about IKS resources, their significance, and cultural context
- **Outreach Programmes:** Organising workshops, lectures, and events promoting IKS, and fostering cultural awareness and appreciation
- **Collaborations:** Partnering with educational institutions, research organisations, and community groups to amplify IKS visibility and impact. By playing these roles, libraries ensure the preservation and dissemination of Indigenous Knowledge Systems, promoting cultural diversity, and enriching global knowledge.⁷

Significance of Indian Knowledge Systems

Libraries play a vital role in preserving, disseminating, and integrating IKS into the mainstream curriculum. By leveraging digital technologies, collaborating with communities, and addressing challenges, libraries can promote IKS and contribute to the realisation of NEP 2020's vision. NEP 2020 recognises the importance of IKS in shaping India's intellectual heritage. It encompasses a wide range of disciplines, including philosophy, spirituality, medicine, mathematics, astronomy, and architecture. Libraries, with their vast collections and resources, can play a crucial role in reviving these knowledge systems and

making them relevant to today's academic and research environments. IKS, a rich tapestry woven from ancient texts and practices, offers a profound perspective on life, nature, and the universe. IKS encompasses traditional knowledge, cultural heritage, and indigenous practices.⁶ Integrating IKS into education enhances cultural sensitivity, promotes diversity, and provides an alternative perspective to Western-dominated knowledge.⁸

The National Digital Library of India (NDLI) is an ambitious project that preserves and provides access to India's educational and cultural resources. Developed by IIT Kharagpur and the Ministry of Education, NDLI gathers digitised materials from institutions, libraries, and museums across India, including ancient manuscripts and texts. This effort is essential to protect and share IKS, covering areas like Ayurveda, Yoga, Indian astronomy, and traditional literature. A key feature of NDLI is the digitisation of rare manuscripts, making traditional knowledge accessible to a global audience, for example, through partnerships with institutions like the Indira Gandhi National Centre for the Arts (IGNCA). NDLI has digitised thousands of historical texts. This ensures the survival of these delicate documents by converting them into high-quality digital formats.

NDLI also organises its resources using metadata and advanced search functions, allowing users to easily find specific topics or texts on traditional knowledge. This makes it a valuable tool for students, educators, and researchers interested in IKS. In addition to offering resources, NDLI supports educational outreach by creating curated collections aligned with school and university courses, helping teachers integrate IKS into their classes. It also hosts online exhibitions and webinars on topics like traditional Indian medicine or ancient sciences, making IKS resources available to a wider audience.

Though NDLI faces challenges like limited funding and the need for skilled staff, its collaborations and innovative methods are paving the way for a sustainable preservation strategy. NDLI is a key player in fulfilling the NEP 2020 vision, ensuring that India's rich traditional knowledge remains alive, accessible, and integrated into modern education⁹.

Strategies for Effective Integration

Develop National Standards for IKS Digitisation and Cataloguing

- Establish a standardised framework for digitising and cataloguing IKS to ensure consistency and accessibility.
- Collaborate with indigenous communities, experts, and stakeholders to develop guidelines.
- Consider factors like cultural sensitivity, intellectual property rights, and technical specifications.
- Ensure standards align with international best practices and facilitate global sharing.

Establish IKS Research Centres

- Create specialised research centres to study, document, and promote IKS.
- Foster interdisciplinary collaboration among scholars, indigenous knowledge holders, and practitioners.
- Conduct research on IKS applications, preservation methods, and community engagement strategies.
- Provide resources, funding, and infrastructure for IKS research and innovation.

Provide Training and Capacity-Building Programmes

- Offer workshops, training programmes, and fellowships for indigenous knowledge holders.
- Enhance capacity for IKS documentation, preservation, and transmission.
- Develop skills in digital technologies, research methodologies, and community engagement.
- Empower indigenous youth and community members to become IKS ambassadors.

Foster Community Partnerships

- Collaborate with indigenous communities to co-create IKS preservation initiatives.
- Build trust through inclusive decision-making, cultural sensitivity, and benefit-sharing.
- Support community-led IKS projects, providing resources and expertise.
- Ensure community ownership and control over IKS documentation and dissemination.

Develop IKS-Based Educational Programmes

- Integrate IKS into school curricula, highlighting its relevance and value.
- Design culturally responsive educational materials and resources.
- Develop IKS-focused courses, certificates, and degree programmes.
- Promote interdisciplinary learning, combining traditional knowledge with modern sciences.
- These initiatives will help preserve, promote, and empower Indigenous Knowledge Systems for future generations.

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Library Initiatives for IKS Integration

- **Interdisciplinary Research:** Libraries can facilitate collaborations between scholars from diverse disciplines to study and promote IKS.
- Share ideas and skills
- Create new research methods
- Understand how IKS applies to modern life
- Develop new ways of thinking
- **Collection Development:** Libraries should acquire and digitise IKS resources, including ancient texts, manuscripts, and oral traditions.

- **Community Engagement:** Libraries can collaborate with local communities, scholars, and cultural organisations to promote IKS.

Collaborative Approaches

- **Community Outreach:** Libraries can engage with local communities to document and preserve partnerships with local organisations and cultural groups.
- **Teacher Training:** Libraries can provide training for educators to integrate IKS into curricula.
- Help teachers understand IKS
- Teach effective ways to share IKS
- Encourage critical thinking and cultural awareness
- Support creating new curriculum and resources
- Help document and digitise IKS resources
- Preserve cultural heritage
- Make IKS accessible to communities

Challenges & Opportunities

While integrating IKS, libraries face challenges such as:

Cultural sensitivity

- **Resource constraints:** Limited resources (money, staff, infrastructure)
- **Digital divide:** Unequal access to technology
- **Cultural sensitivity:** avoid misrepresenting IKS
- However, this integration also presents opportunities for:
- **Cultural revitalization:** Preserving India's cultural heritage
- **Knowledge democratization:** Sharing IKS knowledge widely
- **Innovative pedagogy:** Developing innovative teaching methods

Future Directions

The future of libraries in the context of NEP 2020 is promising. Libraries can further enhance their role by

- **Developing Innovative Digital Services:** Exploring emerging technologies like virtual reality and augmented reality to create immersive learning experiences
- **Strengthening International Collaborations:** Partnering with libraries and institutions worldwide to share knowledge and resources
- **Advocating for Library Funding:** Lobbying for increased funding to support library services and infrastructure
- **Embracing Open Access:** Promoting open access to IKS resources to ensure wider dissemination

By addressing these gaps, libraries can effectively integrate IKS into education, enriching India's intellectual heritage and fostering holistic learning experiences.

Findings and Results:

This study's literature review and analysis reveal the following key findings:

- Libraries play a pivotal role in promoting Indian Knowledge Systems (IKS) in education, aligning with NEP 2020 goals.
- Integration of IKS enhances critical thinking, creativity, and problem-solving skills in students.
- Existing challenges include limited accessibility to IKS resources and insufficient teacher training.
- Strategic initiatives, such as collaborative approaches and digital initiatives, can bridge the gap between traditional knowledge and modern education.

Implications

These findings and results underscore the significance of libraries in promoting IKS and addressing existing challenges. They also highlight the need for:

- Increased government support for library infrastructure development.
- Allocation of funds for IKS resource digitization.
- Establishment of national IKS curricula standards.
- Teacher training programs for IKS integration.

By addressing these gaps, libraries can effectively integrate IKS into education, enriching India's intellectual heritage and fostering holistic learning experiences.

Conclusion

Libraries play a crucial role in promoting IKS in education. By working together and using strategic approaches, libraries can promote IKS and enrich India's intellectual heritage, foster critical thinking and cultural awareness, support national education goals, and engage communities in cultural preservation. The literature review highlights the significance of IKS integration in modern education and the role of libraries in promoting IKS. However, challenges persist, and further research is needed to address these gaps and explore effective strategies for integrating IKS into education. Libraries play an essential role in integrating IKS into the education framework, as envisioned by NEP 2020. By adopting strategic initiatives and collaborative approaches, libraries can promote IKS, enriching India's intellectual heritage. Libraries play a vital role in bridging the gap between traditional Indian knowledge and modern education. They must preserve and promote India's rich cultural heritage, making it accessible to learners in various formats, both physical and digital. This includes acquiring and digitising ancient texts, manuscripts, and oral traditions, as well as developing information literacy programmes focused on IKS. By doing so, libraries can facilitate a holistic learning experience, fostering critical thinking, creativity, and problem-solving skills in students.

NEP 2020 revolutionises India's education landscape by adopting a holistic and multidisciplinary approach. Its primary objective is to cultivate critical thinking, creativity, and problem-solving skills in students.

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