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Integration of Indian Knowledge System in Education Through Nep 2020

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Abstract

The National Education Policy 2020 is a comprehensive framework that aims to transform the education system of Bharat by making it more inclusive, holistic, and multidisciplinary. One of the main focuses of NEP 2020 is to revitalize the Indian Knowledge System to preserve and safeguard the Indian culture and its valuable intellectual heritage. NEP 2020 focuses on analyzing strategies through which conventional knowledge and wisdom can be disseminated along with modern education. This review article focuses on the recommendations given in the NEP 2020 for incorporating the Indian Knowledge System with modern education. It also examines its implementation's importance, possible benefits, and challenges. This review article is a systematic literature analysis that includes a few case studies, conceptual research work, and original documents of the NEP 2020 and IKS. The Indian Knowledge System includes Vedic education, yoga, ayurveda, mathematics, and different disciplines, maintaining a balance between material and spiritual life. Integrating IKS with modern education will help in preserving India's rich knowledge system and enhancing the global competitiveness that will result in attracting international students. Through the review, it has been realized that integrating IKS may face challenges like lack of resources, unprepared teachers, lack of teacher training, lack of funds, adaptable curriculum for IKS, etc. To face these challenges, there is a need to conduct more research studies and reviews so that effective steps can be planned to bring out the needed changes and improvements in the policy.

***Keywords*:** NEP 2020, Indian Knowledge System, IKS, Traditional, Education.

Introduction

The National Education Policy 2020 is a comprehensive program by the Government of India that aims to bring a paradigm shift in the education system of India. It is the first education policy of the 21st century that aims to contribute to revamping the Indian education system by bridging the gap between traditional and modern knowledge, fostering interdisciplinary and multidisciplinary approaches, integrating IKS, promoting multilingualism, increasing the use of ICT and AI, emphasizing on experiential learning, and innovative pedagogy, and aims to transform the education system into more inclusive, holistic, student-centered and global. The integration of the Indian Knowledge System in education is important so that traditional knowledge can be preserved and disseminated to students to make them more connected to their cultural roots and to cultivate a sense of pride in Indian culture and heritage. It will help in the holistic development of students by introducing the knowledge of spiritual, moral, and value aspects (Gaur, 2024). It will help to develop a unique skill-based personality that will create more scope for employability. Including different disciplines like yoga, Vedic education, ayurveda, etc. will help promote a multidisciplinary approach that will foster the development of critical and creative thinking, and spiritual understanding. So, this review article focuses on the benefits

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of integrating IKS, potential challenges, and recommendations given in the NEP 2020 for a well-planned integration of the Indian Knowledge System in the education system.

Indian Knowledge System

IKS is the systematic and organized collection of traditional tacit knowledge of ancient civilizations of India which is still critical and scientific in nature. This knowledge may or may not be in literary and non-literary forms (Chandel & Prashar, 2024) that need to be preserved and disseminated to the children of the 21st century. The NEP 2020 recognizes the importance and value of IKS and it focuses on its preservation so that it can be incorporated scientifically into the education structure to resolve the emerging challenges of India. The core principles of IKS are a holistic approach, harmony and balance between traditional and modern knowledge, spiritual aspect, and practical knowledge (Gupta & Jaiswal, 2025). Along with these principles, the main subject areas in which IKS has contributed are: science and mathematics, ayurveda, astronomy, Vedic philosophy, Indian classical literature, languages, art and culture, health science, mindfulness and meditation, physical and mental health (Gaur, 2024). The IKS document has also mentioned the key components of Indian knowledge which include: Jnan, Vigyan, and Jeevan darshan which implies that traditional knowledge has advanced out of observation, experimentation, and experience.

Overview of NEP 2020

(Salient Features of NEP, 2020, n.d.) The NEP 2020 aims to bring various changes in the education policy and system to make the country more global and developed. The following are the main features of NEP 2020:

1. Universal access to school education.
2. New education structure (5+3+3+4).
3. Emphasis on multilingualism and regional languages of India.
4. Transforming assessment for student development.
5. Setting up a new assessment centre- PARAKH.
6. Promoting more holistic and inclusive education.
7. Integration of Indian culture and heritage (IKS) and multilingualism.
8. Reforms in teacher education.
9. Fostering of open and distance learning.
10. Inclusion of interdisciplinary and multidisciplinary approaches in higher education.

The National Education Policy 2020 puts special emphasis on promoting Indian culture and values through education. 197 Indian languages declared as endangered by UNESCO call for special attention to preserving lost traditional knowledge, languages, literature, heritage, and values (guidelines for incorporating Indian Knowledge). To promote IKS, NEP 2020 has recommended the use of a multidisciplinary and multilingual approach to facilitate easy access to traditional knowledge.

Methodology

This is a theoretical literature work based on secondary data sources such as books, peer-reviewed articles (from 2020-2025), Google websites, and official reports on IKS and NEP 2020 documents. It explores the importance and challenges of integrating IKS and NEP 2020 in detail and the necessary actions for its successful implementation.

Integration of IKS in Education Through NEP 2020

(Mishra et al., 2024; Vageeshan & Kamalakar, 2025; Khan & Sharma, 2024; Gaur, 2024; Chandel & Prashar, 2024) NEP 2020 is a great medium to re-introduce and integrate the IKS into the Indian education system to preserve and disseminate ancient Indian knowledge. It is important to have planned strategies for the successful implementation of IKS. After going through the documents of NEP 2020, IKS, and other research works, the main strategies that are focused on its implementation are:

1. Curriculum design and reform to integrate the content related to IKS.

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2. Teacher or faculty training to generate a positive attitude and interest towards IKS and to equip educators and faculty with the necessary skills to teach IKS.
3. Resource development and documentation to avail teaching aids using ICT and AI; translating and interpreting the IKS content.
4. Establishing different IKS centres with an interdisciplinary approach like research centres, teacher training centres, Bhasha Kendra, etc.
5. National and international collaborations with different organizations and institutions to promote and disseminate Indian heritage and cultural knowledge.
6. Promotion of research projects and publications in IKS.
7. Development of online and offline courses on IKS.
8. Fund allocation and availability for developing and implementing IKS-based courses or educational programs.

Key Areas of Integration

Curriculum

(Gupta & Jaiswal, 2025; Maheshkumar & Soundarapandian, 2023; Sonpakar, 2025; Khan & Sharma, 2024) the main disciplines that should be a part of the IKS curriculum are:

1. **Science and Mathematics**, which will focus on the Indian contribution to different concepts like advanced astronomy, Aryabhatiya, celestial observations, the concepts of zero, advanced geometry, etc.
2. **Health sciences**, which will focus on the pillars of Indian health sciences i.e. Medicine and Health including knowledge about ayurveda and yoga practices for the well-being of physical, emotional, mental, and spiritual health.
3. **Linguistics**, including literary works, wide collection of literature in different regional languages but most of the work is present in the Sanskrit language.
4. **Art and architecture**, including artworks in different forms and the aesthetics of temples, sculptures, spiritual symbolism, etc.
5. **Agricultural practices** including different techniques and traditional agriculture forms and their advanced understanding.
6. **Economics** and **political understanding** through texts like Arthashastra by Chanakya, insights on economics, administration, trade, etc.
7. Insights and understanding of **different philosophies** like Vedic, Upanishad, Nyaya, Sankhya, Yoga, etc. for better philosophical and spiritual growth and well-being.

Pedagogy

(Maheshkumar & Soundarapandian, 2023; Khan & Sharma, 2024; Gupta & Jaiswal, 2025) The Indian knowledge system is a collection of ancient knowledge that is more advanced, scientific, and technical even in the 21st century. The IKS was delivered through different teaching methods and techniques with a focus on various types of learning for the holistic development of a child. Keeping all the aims and objectives of NEP 2020 and the quality of IKS, different pedagogies or learning that are to be emphasized include critical thinking, problem solving, experiential learning, value-based learning, experimental learning, cultivation of the mindset for continuous learning, interdisciplinary and multidisciplinary learning, cultivation of moral value, technological development and innovation which is also a contribution of ancient Indian knowledge system, and to introduce the Gurukul system which is aimed at holistic development, a strong bond of teacher and student and follows a more individualized and holistic approach to learning.

Assessment

(NEP & National Council of Educational Research and Training, 2020) NEP 2020 suggests different assessment methods namely; formative assessment, summative assessment, focus on assessment for learning, competency-based assessment, self and peer assessment and AI tools-based progress monitoring, etc.

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Case Studies

(Mandal et al., 2024) A study was conducted in West Bengal to compare the different aspects of IKS that exist in the CBSE and WBBSE English textbooks of secondary and higher secondary classes. The data collected showed that the number of chapters related to IKS in CBSE is more than the WB board. They also found that some foreign writers also mentioned and used Indian Knowledge in the central curriculum, but only Indian writers have contributed a little in the West Bengal Board. However, the study also showed that the content is still limited and needs to be increased.

(Tiwari, n.d.) conducted research to study the implementation of IKS in teacher education in Nagaland by using a qualitative case study approach. The data was collected through interviews, field observations, and focused group discussions. The participants in the study were teacher educators, pre-service teachers, and policymakers. The main focus of the study was to perceive the impact of research quality and the competencies of teaching, challenges faced by teacher educators and pre-service teachers, and to understand their experience in adopting the Indian knowledge system. Nagaland is culturally rich and diverse, which influences teacher education and sets a fertile ground for the implementation of the Indian knowledge system. The state's effort is to integrate indigenous knowledge in education, which aligns with the aim of NEP 2020 to promote and preserve the Indian knowledge system. According to this study, integrating IKS in teacher education will encourage teachers to explore the local knowledge system to establish community-based learning, foster research quality, document local knowledge, and use traditions and folk narratives as pedagogical tools. The results also showed that the participants had some challenges in integrating IKS in teacher education, such as lack of resources, lack of awareness, and an appropriate curriculum for integrating traditional and modern educational framework.

(Ara, 2024) conducted a study to understand the possibilities of incorporation of IKS in the English language through the theoretical perspectives of Critical pedagogy. In this study, critical pedagogy is taken as a field that aims to identify the problems and crisis in the educational process. Learners are alienated from their cultural roots because of the colonial mindset, which is the result of the continuation of the colonial system in education. So, this study focused on decolonizing the current English language education system by incorporating the indigenous knowledge system and critical pedagogy because it heavily follows the colonial curriculum. It is important to transform the Indian education system to create a more inclusive and diverse learning environment for learners. The study shows that the post-colonial thinkers emphasize the need to be free from the cultural baggage of the English education system to promote the nation's own culture and knowledge system, which is more inclusive as it integrates ancient and modern knowledge. The study also suggested that caution is needed for its implementation as it will require extensive research, funds, and changes in infrastructure. Still, it should not result in narrowly focused nationalism, and to promote IKS, the principle of critical pedagogy like dialogic approach can be used.

Challenges

NEP 2020 focuses on different aims; one of them is the integration and preservation of the Indian knowledge system, but its implementation is not as easy as it seems. After going through some case studies (Mandal et al., 2024; Tiwari n.d.; Ara, 2024) and other relevant studies (Singh, 2024; Joshi & Deivam, 2025; Rahman, n.d.; Sonpakar, n.d.), the main challenges in the implementation of IKS are as follows:

1. There is no clear structure of curriculum for the Indian knowledge system as most of the knowledge is in non-literary form and passed orally from generation to generation. So, it is important to have an organized curriculum to impart the IKS to the new generation.
2. Teachers lack proper training and qualifications about the IKS, which may hamper the successful imparting of indigenous knowledge to the students.
3. The community and the policymakers lack awareness and understanding of IKS.
4. Lack of resources and proper content of IKS is another challenge that requires the data to be organized so that it can be provided to the students.

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5. Such a change in the education system will require teachers to adapt their teaching methods and some faculty and teachers may show resistance to this change.
6. Few states have implemented the IKS which doesn't allow for proper pilot studies.
7. The political factor plays an important role in its implementation. The opposition parties interfere and oppose the new education policy which creates rigidity to adapt it.
8. There is a lack of resources, teaching aids, tools, and funding to impart IKS successfully.
9. Language barrier plays a vital role as IKS is mostly present in Sanskrit language or regional languages which needs translation so that the aim of prioritizing mother tongue can be achieved and the knowledge can reach to each student.
10. Cultural diversity and acceptance may play a crucial role in the challenges.
11. As our education system is largely influenced by western knowledge so, educators, students, policymakers, the community, etc., may find it difficult to adjust to the new system of education.
12. The Indian education system heavily follows the rote learning system but, the IKS and NEP 2020 focus on shifting it to experiential learning which again, may pose a challenge in implementing the IKS.

So, it is very important to conduct some pilot studies before fully implementing the NEP 2020 and IKS so that necessary actions can be taken, needful resources can be facilitated to educators and teachers, and an adapting environment will be created for students to access the Indian Knowledge System.

Conclusion

The National Education Policy 2020 focuses on the holistic development of a child and integrating the Indian Knowledge System which can help students become more equipped with the necessary skills and a blend of ancient and contemporary knowledge for employability (Mishra et al., 2024). It is a comprehensive framework that focuses on fostering creativity and innovation by bridging the gap between traditional knowledge and modern scientific knowledge. However, the success of this initiative depends on the collaboration and cooperation of the community, educators, and policymakers (Vageeshan & Kamalakar, 2025). The integration of IKS has its pros and cons and its challenges that can be replaced gradually. The NEP 2020 is a remarkable paradigm shift in the Indian education system which aims to make it more inclusive, holistic, and global and follows an interdisciplinary and multidisciplinary approach to integrate the IKS to preserve and revive the traditional Indian knowledge.

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