Role of Indian Knowledge System for Viksit Bharat

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Abstract

National Education Policy 2020 is the landmark in the history of Indian Education System and aims to address many growing developmental changes in our country. This policy proposes the revision and revamping of all aspects of the education structure including its regulation and governance to create a new system that is aligned with national goals of education including sustainable development goal while building upon India's traditions and value systems. The New Education Policy (NEP) 2020 has been launched to transform the Indian education system using holistic development of the learners. This framework provides a comprehensive and integrated strategy for the growth of the education system. The National Education Policy (NEP) 2020 aims to foster holistic development by integrating Indian Knowledge Systems (IKS) like Ayurveda, Yoga, Vedas, and traditional arts and crafts in to the education curriculum. Incorporating IKS can preserve India's intellectual heritage while cultivating an inclusive, culturally grounded approach to learning. However, effective integration requires a systematic approach involving curricular interventions such as introducing foundational IKS courses, integrating IKS perspectives across disciplines, promoting research and innovation, providing experiential learning, collaborating with knowledge holders, and building faculty capacity. The main objective of the National Education Policy 2020 is to fill the gaps in the current education system and integrate IKS to provide timely quality education across the country.

Keywords: Indian Knowledge System (IKS), National Education Policy-2020 (NEP), Holistic Development etc.

Introduction

National Education Policy- 2020 is the landmark in the history of Indian Education System and aims to address many growing developmental changes in our country. This policy proposes the revision and revamping of all aspects of the education structure including its regulation and governance to create a new system that is aligned with national goals of education including sustainable development goal while building upon India's traditions and value systems. The New Education Policy (NEP)- 2020 has been launched to transform the Indian education system using holistic development of the learners. This framework provides a comprehensive and integrated strategy for the growth of the

education system. The National Education Policy (NEP) - 2020 aims to foster holistic development by integrating Indian Knowledge Systems (IKS) like Ayurveda, Yoga, Vedas, and traditional arts and crafts into the education curriculum. Incorporating IKS can preserve India's intellectual heritage while cultivating an inclusive, culturally grounded approach to learning. However, effective integration requires a systematic approach involving curricular interventions such as introducing foundational IKS courses, integrating IKS perspectives across disciplines, promoting research and innovation, providing experiential learning, collaborating with knowledge holders, and building faculty capacity. The main objective of the National Education Policy 2020 is to fill the gaps in the current education system and provide timely delivery of quality education.

Education is the cornerstone of societal progress, shaping individuals and societies. However, the modern Indian education system has often been criticized for its emphasis on rote learning, disconnected from the country's rich heritage and diverse knowledge systems (Batra, 2015). The National Education Policy (NEP) 2020 seeks to address this by fostering holistic development through the integration of Indian Knowledge Systems (IKS), which encompass disciplines like Ayurveda, Yoga, traditional architecture, astronomy, mathematics, and literature. Incorporating IKS into higher education curricula can preserve India's intellectual heritage while cultivating a more inclusive, culturally grounded, and holistic approach to learning (Singh & Kumar, 2023). This could involve introducing foundational IKS courses, integrating IKS perspectives into existing courses, developing interdisciplinary IKS-modern science programs, promoting research and innovation in IKS domains, providing experiential learning opportunities, collaborating with traditional knowledge holders and organizations, and building capacity through faculty training, teaching materials, and dedicated IKS centres. However, such integration should be approached with sensitivity, respect, and academic rigor, aiming to preserve the authenticity of traditional knowledge while fostering critical inquiry, dialogue, and cocreation of knowledge in consultation with relevant stakeholders. "Educate and raise the masses, and thus alone a nation is possible."-Swami Vivekananda. India was a beacon in terms of knowledge to the world. It was a haven to knowledge seekers of the world like Fahien and Huen Tsang, to name a few, who flocked to India to a mass knowledge from this reservoir which generously shared its knowledge in various fields. The English language has helped to provide international platform and academic recognition to great litterateurs like Tagore who is acclaimed as the first Indian recipient of the Nobel Prize. English writers like T.S. Eliot, Rudyard Kipling and E. M. Foster document the Indian aestheticism and sensibilities in their writings. India is a cultural treasure trove with a rich history that has given rise to a wealth of art, literature, traditions, artefacts, language expressions, and heritage sites. Every day, millions of people from all over the world participate in enjoy, and profit from this cultural wealth by among other things, travelling to India to experience the country's hospitality, buying Indian handicrafts and handmade textiles, reading Indian classic literature, engaging in yoga and meditation, finding inspiration in Indian philosophy, attending Indian festivals, appreciating Indian music and art, and watching Indian movies. According to India's tourism motto, it is this cultural and natural wealth that makes India really "Incredible India".

India is a country with an ancient civilizational history and practices that are known to mankind. It is expected to accumulate some knowledge throughout its existence. This ancient knowledge was preserved on palm trees and transferred from generation to generation orally. But over time there were abrupt changes in the knowledge

transformation process and this indigenous knowledge was lost. The newly introduced education system has attempted to provide this knowledge to society as demanded. Indian Knowledge System (IKS) comprises three words namely: *Indian, Knowledge, and System*.

- 1. **Indian**: It refers to Akhanda Bharata i.e., undivided Indian subcontinent. It covers the area that spans from Burma on the east, modern-day Afghanistan on the west, the Himalayas on the north, and the Indian Ocean on the south. Chanakya was instrumental in the establishment of the Mauran Empire and Panini who wrote Sanskrit grammar got their education at Takshashila University of ancient India now in Punjab, Pakistan. Ancient Indian education included the teaching of eighteen Vidya Sthanas, or schools of learning, which were imparted in renowned centres such as Nalanda and Takshashila. India's global reputation has been derived from its contributions in the fields of Art, Architecture, Science, Technology, Craft, Engineering, Philosophy, and Practices. Most of the foreigners who visited India for knowledge and disseminated this knowledge to the West and other parts of the world. This is a part of IKS.
- 2. **Knowledge**: Knowledge refers to the tacit knowledge and it lies in the wisdom of knowledge seekers. It is gained by insights into personal experiences, through observations, facing real-life problems, and solving them. Knowledge may exist in literary and non-literary forms. This tacit knowledge is transferred systematically by way of proposing new theories, and frameworks, and in the form of literary work i.e. in the form of explicit knowledge.
- 3. System: System means a well-organized methodology and classification scheme used to access a body of knowledge. The codification and classification are based on the need, interest, and capacity of the knowledge seeker so that he may access the inherent knowledge. This will help them gain insights from overall knowledge and know-how that different knowledge components logically complement each other .The IKS is the systematic transfer of ancient and contemporary knowledge from one generation to another. It covers ancient knowledge from various domains to address current and future challenges. This knowledge exists in both literary and non-literary works. Literary resources cover Vedic and allied literature (Sanatana Dharma mainly in the Sanskrit Language), resources on other Dharmic traditions (Buddhism and Jainism), and, knowledge that exists in Indian languages and dialects. Non-literary resources are present in oral traditions available across the country (B., RAJAT, & R.N., 2022).
- 4. Arts, Culture and IKS: One of the main ways to spread culture is through the arts. The arts are well known for enhancing people's cognitive and creative capacities as well as their overall pleasure. They also help to strengthen cultural identity, promote awareness, and uplift societies. Indian arts of all kinds must be made available to students at all stages of school, beginning with early childhood care and education, for several reasons, including their happiness/well-being, cognitive development, and sense of cultural identity. Of course, there is a close relationship between language and art and culture. Different languages "see" the world in different ways, and a language's grammar impacts how a native speaker interprets their surroundings. Particularly, languages affect the manner in which members of a given culture communicate with others, including family members, superiors, peers, and strangers, as well as the tone of their conversations. Conversations between speakers of a shared language reflect and document a culture by their tone, sense of experience, and familiarity (or "apnapan"). Thus, our languages serve as a container for culture. Language is necessary for understanding all forms of art, including those found in

books, plays, music, and movies. The languages of a culture must be preserved and promoted in order to preserve and advance that culture.

- 5. **IKS Division**: In October 2020, the AICTE headquarters became the site of the newly formed IKS division, which is part of the Ministry of Education (MoE). In the knowledge repository, the IKS has 29 IKS research centres, 17 IKS Teacher Training Centres, and 7 IKS Bhasha Kendra. These research centres are interdisciplinary and they will preserve and disseminate the knowledge for further research and societal applications. The IKS Teacher Training Centres will provide necessary training to teachers to understand indigenous and traditional knowledge and IKS Bhasha Kendras will act as centres to promote linguistics and literary knowledge. These centres will rejuvenate the languages which are on the verge of extinction and contain the knowledge to transform the nation.
- 6. Activities under the IKS Division: To provide funding support of Rs. 30-40 lakh over two years by considering the need to establish IKS centres in traditional schools and STEM educational institutions that will promote IKS and related activities. To pair up students with IKS experts under the IKS Internship Program to carry out short-term research projects/ workshops/activities with a stipend (about of Rs. 25000) for two months. To establish a more structured approach to IKS teaching, the regulatory body for technical education has authorized the creation of a textbook entitled 'Introduction to Indian Knowledge System, Concepts and Applications' authored by B. Mahadevan. Some IITs have shown a keen interest in IKS. IIT Guwahati has been offering Ph.D. in spoken Sanskrit and Assamese since its inception in November 2021. IIT Gandhinagar introduced the IKS optional course in 2016, well in advance of the NEP's rise in prominence.
- 7. **NEP-2020 and IKS Inclusion**: The NEP 2020 has emphasized that IKS will be part of the curriculum and will be incorporated scientifically. IKS along with tribal knowledge will be included in mathematics, engineering, philosophy, yoga, medicine, sports, games, literature, languages, and various other domains. NEP has focused on specific courses in tribal ethno medicinal practices, forest management, and organic and natural farming. Under NEP, IKS will be taught as an elective course for secondary school students. These inputs will be delivered through modern technologies, fun games, and cultural exchange programs among different states. NEP focuses on multilingualism and the IKS repository has many languages. Under NEP students will be delivered curriculum in their native languages and Sanskrit the most ancient language will be taught to all. By learning different languages, they will know the rich and diverse culture of the nation. The Multilanguage formula will cover the aspects of Constitutional provisions and it will create unity and Integrity across the nation.
- 8. **IKS & Viksit Bharat**: The Indian Knowledge System (IKS) plays a crucial role in the vision of a *Viksit Bharat (Developed India)*. Rooted in India's ancient traditions, philosophy, science, and culture, the IKS offers a wealth of knowledge that can guide India's development in multiple ways. Here's how the IKS can contribute to a *Viksit Bharat* which are mentioned bellow:-

A. Sustainable Development

• Traditional Agricultural Practices: India has a rich history of sustainable agricultural practices that emphasize ecological balance, soil health, and water conservation. Ancient methods like rainwater harvesting, organic farming, and crop

- rotation can be integrated with modern techniques to create a sustainable agricultural system.
- Ayurveda and Traditional Medicine: The knowledge of holistic health, wellness, and medicinal plants in Ayurveda can offer solutions to healthcare, promote preventive care, and reduce the reliance on chemical-based treatments.
- **Eco-friendly Technologies:** Ancient Indian architecture, especially in the construction of temples and palaces, used techniques like passive cooling, water harvesting, and natural insulation, which can inspire modern sustainable architectural designs.

B. Cultural and Educational Heritage

- **Philosophy and Critical Thinking:** The Indian philosophical traditions, such as Vedanta, Sankhya, and Yoga, emphasize a holistic worldview and the development of critical thinking, self-awareness, and problem-solving. These ideas can be integrated into education to nurture well-rounded, ethically aware citizens.
- Languages and Literature: The richness of Indian languages, literature, and scripts can help preserve cultural heritage and foster a more inclusive national identity. Promoting these languages and integrating ancient texts with contemporary education can enrich India's educational system.
- Value-Based Education: IKS emphasizes values such as respect for nature, non-violence (ahimsa), truth (satya), and duty (dharma), which are important for the development of a just and ethical society. Integrating these values into modern education can foster responsible and ethical leadership.

C. Technological Innovation

- Mathematics and Astronomy: Ancient Indian scholars like Aryabhata, Brahmagupta, and Bhaskara contributed significantly to the fields of mathematics and astronomy. India's historical knowledge of zero, trigonometry, and calculus can inspire future technological innovations.
- Engineering and Architecture: India's ancient engineering feats, like the construction of the Iron Pillar of Delhi, the step wells, and the intricate designs of temples, demonstrate advanced knowledge in metallurgy and architecture. This can be adapted for modern engineering challenges.
- Traditional Crafts and Innovation: India's traditional knowledge of textiles, pottery, metallurgy, and carpentry can be combined with contemporary design and manufacturing processes to create innovative, locally relevant, and sustainable products.

D. Community Empowerment

• **Decentralized Systems:** IKS promotes self-sufficiency and community-driven models of development. For example, the traditional Panchayat system, which emphasizes local governance and decision-making, can be adapted to create a more inclusive, decentralized system of governance that empowers rural communities.

- Cooperative Economy: Indian traditions of cooperative farming and communityowned resources can play a role in developing a more equitable economic model that focuses on collective prosperity rather than individual wealth accumulation.
- Self-Reliance (Atmanirbhar Bharat): The concept of self-reliance rooted in IKS can align with India's vision of an "Atmanirbhar Bharat" by focusing on localized production, minimizing dependency on imports, and promoting indigenous industries.

E. Social Harmony and Inclusiveness

- **Diversity and Unity:** India's historical experience in managing diversity through concepts like *Sarvodaya* (welfare for all) and *Samanvaya* (harmony) can offer pathways for fostering inclusiveness, tolerance, and social cohesion in the present day.
- **Gender Equality:** Indian knowledge systems have historically given important roles to women in education, governance, and cultural life. Reviving and reinforcing these traditions can promote gender equality in modern society.
- Conflict Resolution: The Indian tradition of dialogue (e.g., in Mahabharata and other texts) and finding peaceful solutions to disputes can contribute to creating a harmonious society where conflicts are resolved through mutual understanding rather than violence.

F. Spiritual and Mental Well-being

- Yoga and Meditation: Practices like Yoga, meditation, and mindfulness have global recognition today for their benefits in reducing stress, enhancing mental clarity, and promoting well-being. Incorporating these practices into everyday life can contribute to a healthier and more balanced society.
- **Spiritual Wisdom:** IKS offers a deep spiritual framework that emphasizes personal growth, self-realization, and a sense of universal interconnectedness. This can inspire individuals to contribute positively to society, focusing on service and collective well-being.

G. Global Leadership

- **Ancient Diplomacy:** India's ancient knowledge in diplomacy, trade, and governance, as seen in texts like *Arthashastra* by Chanakya, offers lessons in strategic thinking, economic management, and statecraft. These teachings can guide India's role in global governance and international relations.
- Cultural Diplomacy: India's cultural richness, reflected in dance, music, art, and literature, can be a powerful tool for soft power, enhancing India's global influence and fostering international collaborations for development.

9. Key Features of NEP- 2020 Pertaining to Indian Knowledge Systems

• *Multidisciplinary Approach:* NEP 2020 emphasizes a multidisciplinary approach to learning, encouraging students to explore diverse subjects and integrate insights from different knowledge systems. This approach fosters creativity, critical thinking, and a holistic understanding of complex issues.

- **Promotion of Indian Languages**: The policy advocates for the promotion and preservation of Indian languages, recognizing their role in preserving indigenous knowledge systems. By providing multilingual education, NEP 2020 ensures that learners have access to diverse cultural and linguistic resources.
- *Emphasis on Experiential Learning*: NEP- 2020 prioritizes experiential learning methods, including hands-on activities, field trips, and project-based learning. This approach aligns with the principles of Indian knowledge systems, which emphasize learning through direct experience and practical application.
- *Integration of Traditional Arts and Crafts*: The policy underscores the importance of integrating traditional arts and crafts into the curriculum, acknowledging their role in preserving cultural heritage and transmitting traditional knowledge from generation to generation.
- 10. **Challenges in IKS Integration**: While the integration of the Indian Knowledge System into the education system presents immense opportunities, it also comes with its fair share of challenges that must be addressed.
 - Curriculum Development and Implementation: Integrating IKS into the curriculum requires a comprehensive and well-planned approach. Educators and policymakers must work together to carefully select and incorporate relevant aspects of IKS into the various subject areas, ensuring that the integration is seamless and meaningful. This process may involve extensive research, dialogue with experts, and the development of appropriate teaching-learning materials.
 - Teacher Capacity Building: Successful integration of IKS into the education system heavily relies on the capacity and preparedness of teachers. Comprehensive training programs must be developed to equip educators with the necessary knowledge, skills, and pedagogical approaches to effectively teach and incorporate IKS-based concepts and practices in the classroom. On-going professional development and support will be crucial to ensure the effective implementation of the IKS-integrated curriculum.
 - Addressing Biases and Misconceptions: Over the years, the Indian Knowledge System has been subject to various biases, misconceptions, and even dismissal by certain sections of the academic and intellectual community. Overcoming these biases and establishing the credibility and relevance of IKS in the modern context will be a significant challenge. Rigorous research, academic discourse, and awareness campaigns will be necessary to dispel these misconceptions and highlight the value and contributions of the Indian Knowledge System.
 - *Balancing Modernity and Tradition*: The integration of IKS into the education system must strike a delicate balance between preserving the traditional knowledge and adapting it to the needs of the modern world. Policymakers and educators must carefully examine the relevance and applicability of various IKS-based concepts and practices, ensuring that they align with contemporary challenges and are presented in a manner that resonates with the students.
 - Ensuring Inclusivity and Accessibility: The Indian Knowledge System is diverse and broad, encompassing the contributions of various communities, regions, and traditions. Ensuring that the IKS integration in education is inclusive and accessible to all learners, regardless of their socio-economic, cultural, or geographical

backgrounds, will be a crucial consideration. Strategies must be developed to identify and incorporate diverse perspectives and representations within the IKS-integrated curriculum.

- *Maintaining Academic Rigor and Quality*: While integrating IKS into the education system, it is essential to maintain the highest standards of academic rigor and quality. The integration of IKS must be carried out in a manner that enhances the overall quality of education, without compromising the scientific and analytical foundations of the curriculum. Balancing the traditional knowledge with modern pedagogical approaches and research methodologies will be a key challenge.
- Interdisciplinary Collaboration and Partnerships: Successful integration of IKS into the education system will require close collaboration and partnerships between various stakeholders, including academicians, researchers, traditional knowledge holders, and community representatives. Fostering these interdisciplinary partnerships and facilitating the exchange of knowledge and expertise will be crucial for the effective implementation of the IKS-integrated curriculum.

Conclusion

The Indian Knowledge System provides a treasure trove of ideas and practices that, if integrated with contemporary development strategies, can pave the way for a *Viksit Bharat*. By combining the best of ancient wisdom with modern science and technology, India can build a sustainable, inclusive, and prosperous future while staying rooted in its cultural identity. The integration of the Indian Knowledge System into the education system, as envisioned by the National Education Policy 2020, holds immense potential for the holistic development of individuals and the nation. By preserving and revitalizing this rich heritage, promoting an interdisciplinary approach, and fostering critical thinking and problem-solving skills, the IKS-integrated education can contribute to the empowerment and transformation of the country. However, the successful implementation of this integration will require a comprehensive and collaborative approach that addresses the challenges and considerations outlined, while constantly adapting to the evolving needs of the modern world.

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