



Implication of Indian Knowledge System (IKS) on Re-modeling Indian Education with References to NEP-2020

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Abstract

The Indian Knowledge System (IKS) encompasses diverse knowledge traditions that have evolved through generations across fields such as philosophy, science, mathematics, medicine, arts, yoga, and environmental knowledge. This paper examines the conceptual implications of IKS for remodelling Indian education in the context of the National Education Policy (NEP) 2020. It focuses on four complementary dimensions of IKS: the six *Pramāṇas* as perspectives on knowledge acquisition and validation, the *Pancha Kosha* framework as a model of holistic human development, the interdisciplinary character of Indian knowledge traditions, and the four *Ashramas* as a perspective on lifelong learning and human development. The analysis relates these dimensions to key educational objectives of NEP 2020, including experiential and inquiry-based learning, critical thinking, multidisciplinary education, value development, learner well-being, and lifelong learning. The discussion suggests that IKS can provide culturally rooted perspectives for enriching contemporary education while complementing modern scientific and pedagogical approaches. However, its integration requires systematic curriculum development, teacher preparation, authentic learning resources, and critical and evidence-informed engagement with traditional knowledge. The paper concludes that a balanced integration of relevant IKS perspectives with contemporary educational practices can contribute to a more holistic, multidisciplinary, and culturally responsive education system aligned with the broader objectives of NEP 2020.

Keywords: Indian Knowledge System (IKS), NEP 2020, Holistic Education, Multidisciplinary Learning; Experiential Learning, Lifelong Learning

1. Introduction

The Indian Knowledge System (IKS) represents a broad and diverse body of knowledge traditions through which ideas, skills, and understanding have been preserved, transmitted, and developed across generations. It encompasses diverse fields, including traditional sciences, literature, philosophy, arts, Ayurveda, yoga, mathematics, and knowledge related to agriculture and sustainable living (Ministry of Education, 2020; IKS Division, 2025) ^[5, 4]. These traditions reflect important dimensions of India's intellectual and cultural heritage. Integrating relevant aspects of such knowledge into contemporary education is not merely a means of preserving traditional practices; rather, it provides an opportunity to examine their educational relevance in relation to contemporary learning needs. In this context, IKS has gained increasing attention for its potential contribution to interdisciplinary learning, cultural awareness, well-being, and sustainable approaches to knowledge and living (Ministry of Education, 2020; IKS Division, 2025) ^[5, 4].

The National Education Policy (NEP) 2020 emphasizes the incorporation of Indian knowledge traditions into the contemporary education system as part of its broader vision of holistic, multidisciplinary, and culturally rooted education. It encourages the integration of Indian Knowledge Systems, languages, arts, and culture across educational levels while seeking to connect India's knowledge heritage with contemporary educational practices (Ministry of Education, 2020; UGC, 2023) ^[5]. The integration of IKS with contemporary education therefore provides an opportunity to examine how traditional knowledge perspectives can complement modern scientific and pedagogical approaches. IKS also encompasses diverse areas of knowledge and encourages interdisciplinary engagement, including in fields such as health and well-being, arts and culture, mathematics, astronomy, agriculture, and other domains (IKS Division, 2025) ^[4]. In this context, examining the relationship between IKS and the objectives of NEP 2020 provides a basis for rethinking and

remodelling Indian education in ways that connect cultural heritage with contemporary educational requirements.

2. Indian Knowledge System and NEP 2020

The Indian Knowledge System (IKS) has evolved over centuries as a diverse intellectual tradition encompassing different forms of knowledge, inquiry, learning, and cultural practices. Indian knowledge traditions include areas such as mathematics, astronomy, medicine, philosophy, linguistics, agriculture, arts, architecture, and environmental knowledge, reflecting a broad engagement with different dimensions of human and natural life (Ministry of Education, 2020; Indian Knowledge Systems Division, 2025) ^[5, 2]. The IKS Division of the Ministry of Education also promotes interdisciplinary and transdisciplinary research and the integration of IKS into education and research (Indian Knowledge Systems Division, 2025) ^[2].

The transmission of Indian knowledge traditions has taken place through diverse textual, oral, institutional, and teacher–student traditions. However, the development of the modern education system during the colonial period brought significant changes in educational institutions, curricula, and modes of knowledge transmission. Contemporary efforts to engage with IKS therefore seek to examine and incorporate relevant knowledge traditions within present educational contexts rather than simply reproduce historical forms of education (Ministry of Education, 2020) ^[5]. NEP 2020 provides an explicit policy framework for incorporating Indian knowledge traditions into contemporary education. It emphasizes knowledge of India and its rich cultural and intellectual traditions and encourages the inclusion of Indian Knowledge Systems across disciplines and educational levels (Ministry of Education, 2020) ^[5]. The policy also emphasizes multidisciplinary education, critical thinking, holistic development, Indian languages, cultural awareness, and experiential learning. In higher education, the UGC's guidelines further provide a framework for incorporating IKS into curricula and encouraging its systematic engagement within higher educational institutions (University Grants Commission, 2023) ^[9].

The philosophical and educational dimensions of IKS can therefore be examined in relation to the broader objectives of NEP 2020. Rather than treating IKS and contemporary education as separate domains, their integration can provide opportunities to connect Indian intellectual traditions with modern disciplinary knowledge, research, and pedagogical practices. The Ministry of Education's implementation framework similarly identifies embedding IKS in curricula, developing content in Indian languages, and promoting India's knowledge traditions as important components of NEP implementation (Ministry of Education, 2020) ^[5]. Thus, the relationship between IKS and NEP 2020 provides a conceptual basis for examining how Indian education can become more holistic, multidisciplinary, culturally rooted, and connected to contemporary educational needs.

3. Concept of Remodelling Indian Education through IKS

Remodelling Indian education through the Indian Knowledge System (IKS) refers to integrating relevant Indian knowledge traditions with contemporary scientific knowledge, educational practices, and learning needs. It

seeks to make education more holistic, multidisciplinary, experiential, and culturally rooted while maintaining academic and scientific standards (Ministry of Education, 2020; University Grants Commission, 2023) ^[5, 9]. Such integration can strengthen learners' engagement with India's intellectual and cultural heritage while connecting traditional knowledge with contemporary social and educational contexts.

3.1 Holistic and Multidisciplinary Learning

Holistic education emphasizes the integrated development of the learner rather than focusing exclusively on academic achievement. IKS contains perspectives that connect physical, mental, intellectual, ethical, social, and cultural dimensions of human development. Its interdisciplinary character also provides opportunities to connect areas such as mathematics, medicine, agriculture, philosophy, arts, and environmental knowledge (Indian Knowledge Systems Division, 2025) ^[2]. This orientation is consistent with NEP 2020's emphasis on holistic and multidisciplinary education (Ministry of Education, 2020) ^[5].

3.2 Value-Based Education

Indian knowledge traditions place considerable emphasis on ethical conduct, self-discipline, responsibility, compassion, and social well-being. Concepts such as *Dharma*, *Satya*, *Ahimsa*, and *Seva* can provide perspectives for discussing ethical and value-based dimensions of education. Their educational relevance can be considered alongside NEP 2020's emphasis on character formation, ethical values, empathy, responsible citizenship, and holistic development (Ministry of Education, 2020; University Grants Commission, 2023) ^[5, 9].

3.3 Experiential and Activity-Based Learning

IKS includes learning approaches that emphasize observation, reflection, practice, and the teacher–student relationship. The principles of *Shravana*, *Manana*, and *Nididhyasana*—listening, reflection, and contemplation—can be interpreted in relation to contemporary approaches that encourage active engagement with knowledge. Such perspectives complement NEP 2020's emphasis on experiential, inquiry-based, and activity-oriented learning (Ministry of Education, 2020) ^[5].

3.4 Integration of Knowledge and Local Contexts

The integration of IKS can provide opportunities to incorporate Indian languages, local knowledge, cultural practices, traditional arts, agriculture, and knowledge of the natural environment into educational contexts. Such an approach can strengthen students' engagement with their local and cultural surroundings while supporting the preservation of India's diverse knowledge traditions (Indian Knowledge Systems Division, 2025) ^[2]. NEP 2020 similarly emphasizes Indian languages, cultural awareness, local context, and the integration of knowledge across disciplines (Ministry of Education, 2020) ^[5].

3.5 Critical Thinking and Creativity

The epistemological and reasoning traditions within IKS provide opportunities to engage learners with observation, inference, questioning, reasoning, and examination of

knowledge. These perspectives can complement contemporary approaches to critical thinking, problem-solving, inquiry, and creativity. NEP 2020 similarly emphasizes conceptual understanding, critical thinking, creativity, and research-oriented learning rather than rote memorization (Ministry of Education, 2020; University Grants Commission, 2023) ^[5, 9].

3.6 Lifelong Learning

IKS can also be interpreted as supporting a broader understanding of learning as a continuous process of intellectual, personal, ethical, and social development. This perspective is consistent with NEP 2020's emphasis on lifelong learning, continuous skill development, flexible learning opportunities, and the development of individuals across different stages of life (Ministry of Education, 2020) ^[5].

4. Six Sources of Knowledge (*Pramanas*) and Their Application in School Curriculum

In Indian philosophy, the concept of *Pramana* refers to a valid source or means through which human beings acquire reliable knowledge. The concept occupies an important position in Indian epistemology, which is concerned with the nature, sources, and validity of knowledge. *Pramanas* provide a framework for understanding how knowledge is acquired, examined, and established, and they help distinguish valid knowledge from incorrect understanding. Traditionally, different schools of Indian philosophy recognize different numbers and types of *Pramanas*. The six *Pramanas* considered in this paper are *Pratyaksha* (perception), *Anumana* (inference), *Upamana* (comparison), *Shabda* (verbal testimony), *Arthapatti* (postulation), and *Anupalabdhi* (non-perception). Their conceptual relevance can be related to contemporary educational approaches that emphasize experiential learning, reasoning, conceptual understanding, reliable sources of knowledge, creativity, and inquiry-based learning.

4.1 *Pratyaksha* (Perception)

Pratyaksha refers to knowledge acquired through direct and immediate sensory experience. It is generally understood as knowledge obtained through perception and direct observation. The concept emphasizes learning through experience and engagement with the objects or phenomena being studied.

4.1.1 Relation to NEP 2020: Experiential Learning

Pratyaksha can be related to the emphasis placed by NEP 2020 on experiential and activity-based learning. Students can develop understanding through experiments, projects, field visits, observation, and other real-life activities rather than relying exclusively on rote memorization.

4.2 *Anumana* (Inference)

Anumana refers to inferential knowledge acquired through reasoning, moving from known information to an understanding of the unknown. It involves logical reasoning and the identification of relationships between observed facts and conclusions.

4.2.1 Relation to NEP 2020: Critical Thinking

Anumana can be associated with the emphasis of NEP 2020 on critical thinking, problem-solving, and analytical skills. Students can be encouraged to examine information, identify relationships, formulate logical conclusions, and justify their reasoning.

4.3 *Upamana* (Comparison)

Upamana refers to knowledge acquired through comparison or similarity. It can help learners understand unfamiliar concepts by relating them to something already known. In this way, comparison can serve as a means of developing conceptual understanding.

4.3.1 Relation to NEP 2020: Conceptual Understanding

Upamana can be related to approaches that promote conceptual clarity through examples, analogies, models, and comparisons. Such methods can make complex or unfamiliar concepts easier for students to understand.

4.4 *Shabda* (Verbal Testimony)

Shabda refers to knowledge acquired through reliable verbal communication, including spoken or written sources of information. It recognizes the importance of trustworthy sources and the transmission of knowledge through language.

4.4.1 Relation to NEP 2020: Role of Teachers and Authentic Sources

Shabda can be related to the importance of teachers, mentors, textbooks, and other reliable educational resources. Knowledge can be transmitted through qualified teachers as well as through authentic written and digital learning materials.

4.5 *Arthapatti* (Postulation)

Arthapatti refers to a form of reasoning in which a postulation is made to explain a situation when the available information cannot otherwise be adequately explained. It can help learners identify relationships and develop explanations when direct evidence is not immediately available.

4.5.1 Relation to NEP 2020: Creativity and Innovation

Arthapatti can be conceptually related to creativity, innovation, research-based learning, and hypothesis formation. It encourages learners to explore possible explanations and think beyond directly available information.

4.6 *Anupalabdhi* (Non-Perception)

Anupalabdhi refers to knowledge concerning the absence or non-existence of something when it is not perceived. It is particularly associated with understanding and establishing the absence of an object or phenomenon.

4.6.1 Relation to NEP 2020: Inquiry-Based Learning

Anupalabdhi can be related to inquiry-based and discovery-oriented learning, in which students observe carefully, ask questions, identify gaps, and investigate why something is absent or not observed.

4.6.2 Educational Relevance of the Six Pramanas

The six *Pramanas* provide different perspectives on the acquisition and examination of knowledge. Their educational relevance can be understood through their connections with observation, reasoning, comparison, reliable communication, postulation, and inquiry. These dimensions correspond conceptually with several contemporary educational approaches, including experiential learning, critical thinking, conceptual understanding, research-based learning, and inquiry-oriented pedagogy. Thus, the *Pramanas* provide a philosophical basis for considering how traditional Indian approaches to knowledge can inform contemporary

educational practices.

5. Pancha Kosha and Its Educational Implications

The Pancha Kosha framework, derived from the *Taittirīya Upaniṣad*, conceptualizes human development through five interconnected dimensions: Annamaya, Pranamaya, Manomaya, Vijnanamaya, and Anandamaya Kosha. These dimensions represent physical, vital, mental, intellectual, and inner aspects of human development and provide a holistic perspective on the learner (*Taittirīya Upaniṣad*, 2.1–2.5). This perspective can be conceptually related to the holistic development of learners emphasized in NEP 2020 (Ministry of Education, 2020) [5].

Table 1: Pancha Kosha and Its Educational Implications

Kosha	Core Dimension	Educational Implication	Relation to NEP 2020
Annamaya Kosha	Physical well-being	Health, nutrition, physical activity, and fitness as foundations for learning	Health, sports, physical education, and holistic development
Pranamaya Kosha	Vitality and self-regulation	Attention to vitality, balance, concentration, and self-regulation	Yoga, well-being, concentration, and balanced development
Manomaya Kosha	Mental and emotional development	Emotional balance, empathy, creativity, values, and social interaction	Value-based education, emotional well-being, and character development
Vijnanamaya Kosha	Intellectual development and discernment	Critical thinking, reasoning, problem-solving, and informed decision-making	Competency-based learning, inquiry, critical thinking, and holistic assessment
Anandamaya Kosha	Inner well-being and self-awareness	Joy in learning, purpose, self-awareness, and inner well-being	Joyful learning, creativity, self-discovery, and holistic well-being

Source: Compiled by the authors based on the *Taittirīya Upaniṣad* (2.1–2.5) and Ministry of Education (2020) [5].

The educational relevance of Pancha Kosha lies in its holistic understanding of the learner. Annamaya and Pranamaya emphasize physical well-being and vitality; Manomaya addresses mental and emotional development; Vijnanamaya emphasizes intellectual growth and discernment; and Anandamaya relates to inner well-being and self-awareness. Taken together, these dimensions can be interpreted as complementary to NEP 2020's emphasis on the physical, emotional, intellectual, ethical, and overall development of learners (Ministry of Education, 2020) [5]. Thus, Pancha Kosha provides an indigenous conceptual perspective for understanding education beyond academic achievement and towards holistic learner development and well-being.

6. Interdisciplinary Applications of the Indian Knowledge System

The Indian Knowledge System (IKS) is rich and diverse, encompassing contributions across various fields of knowledge. Indian scholars and knowledge traditions have contributed to the development of knowledge in areas such as science, mathematics, medicine, philosophy, arts, culture, agriculture, and environmental studies. The interdisciplinary nature of IKS reflects an approach in which different domains of knowledge are interconnected rather than treated as completely separate fields.

In science, IKS includes knowledge traditions related to astronomy, the natural world, and the understanding of physical and environmental phenomena. These traditions reflect forms of systematic observation and inquiry that developed within the Indian intellectual tradition.

In mathematics, Indian knowledge traditions include important developments such as the concept of zero, the decimal system, and methods of mathematical calculation. These contributions have played an important role in the

historical development of mathematical knowledge.

In medicine, traditional systems such as Ayurveda emphasize health, balance, prevention, and the relationship between the body and mind. Similarly, yoga contributes to health and well-being through practices associated with physical fitness, mental balance, concentration, and overall wellness.

In philosophy and ethics, IKS explores questions concerning life, truth, knowledge, morality, and human existence. These traditions can contribute to the development of ethical awareness, reflection, reasoning, and critical thinking among learners.

In arts and culture, IKS encompasses music, dance, literature, architecture, and other forms of cultural expression. These areas reflect India's intellectual and cultural diversity while providing opportunities for creativity, aesthetic development, and the preservation of cultural heritage.

In agriculture and environmental studies, traditional knowledge can provide perspectives on sustainable farming practices, natural resource management, biodiversity, and the relationship between human beings and nature. Such knowledge can contribute to discussions on sustainability and environmental responsibility.

7. Ashrama Framework and Lifelong Learning

The concept of the four *Ashramas* in the Indian Knowledge System presents a framework for understanding human life as a continuous process of learning, responsibility, reflection, and personal development. The four stages—*Brahmacharya*, *Grihastha*, *Vanaprastha*, and *Sannyasa*—organize different stages of life and reflect changing forms of learning, responsibility, and human development. When considered in the context of contemporary education, particularly the National Education Policy (NEP) 2020, this

framework provides a perspective on education as a lifelong process.

7.1 *Brahmacharya*: Student Life and Character Development

The first stage, *Brahmacharya*, emphasizes learning, discipline, character formation, and moral development. During this stage, individuals focus on acquiring knowledge, developing self-discipline, and learning through the guidance of the teacher or *Guru-Shishya* tradition. These principles can be related to NEP 2020's emphasis on foundational learning, holistic development, values, and the development of responsible individuals.

7.2 *Grihastha*: Skills, Work, and Social Responsibility

The second stage, *Grihastha*, represents active participation in society through family responsibilities, work, and social duties. It emphasizes productive engagement and contribution to social and economic well-being. In the context of contemporary education, this stage can be related to vocational education, skill development, employability, internships, and entrepreneurship. These educational components prepare learners for practical responsibilities and participation in social and economic life.

7.3 *Vanaprastha*: Reflection, Mentorship, and Community Engagement

The third stage, *Vanaprastha*, involves a gradual shift away from material pursuits towards reflection, guidance, and mentorship. Individuals in this stage traditionally assume more advisory and reflective roles. In contemporary education, these principles can be related to lifelong learning, mentorship, community engagement, experiential learning, and reflective practices. The emphasis on guidance and social contribution also highlights the importance of sharing knowledge and experience across generations.

7.4 *Sannyasa*: Self-Realization and Value-Based Development

The final stage, *Sannyasa*, emphasizes self-realization, inner peace, reflection, and detachment from worldly desires. It represents a higher stage of personal development and a broader orientation towards wisdom and universal well-being. In contemporary education, this dimension can be related to value education, mindfulness, yoga, self-awareness, ethical development, and emotional well-being. Such elements are consistent with the broader emphasis on holistic development and ethical awareness in NEP 2020.

7.5 Educational Relevance of the Ashrama Framework

The four *Ashramas* provide a perspective in which education is not restricted to childhood or formal schooling but is understood as a continuous process extending across different stages of life. *Brahmacharya* emphasizes learning and character formation, *Grihastha* highlights skills and social responsibility, *Vanaprastha* emphasizes reflection and mentorship, and *Sannyasa* focuses on self-awareness and inner development. Together, these stages provide a conceptual basis for connecting lifelong learning with the broader objectives of holistic education emphasized in NEP 2020.

8. Discussion

The analysis indicates that the Indian Knowledge System (IKS) provides a conceptual foundation for remodelling Indian education through knowledge, holistic development, interdisciplinary learning, values, and lifelong learning. These dimensions broadly correspond with the objectives of NEP 2020, which emphasizes holistic development, multidisciplinary education, experiential learning, critical thinking, and value-based education (Ministry of Education, 2020)^[5].

The six commonly discussed *pramāṇas*—*pratyakṣa*, *anumāna*, *upamāna*, *śabda*, *arthāpatti*, and *anupalabdhi*—offer an epistemological perspective on the acquisition and validation of knowledge (Sharma, 2004)^[8]. Their emphasis on observation, inference, comparison, testimony, reasoning, and non-perception can be conceptually related to experiential learning, inquiry, and critical thinking. This complements NEP 2020's emphasis on developing analytical and research-oriented learning, although the *pramāṇas* should be viewed as an indigenous epistemological framework rather than as equivalents of modern scientific methods (Ministry of Education, 2020; UGC, 2023a)^[5]. The Pancha Kosha framework provides a holistic perspective on learner development by relating physical, vital, mental, intellectual, and inner dimensions of human development (Taittirīya Upaniṣad, 2.1–2.5). This perspective is broadly consistent with NEP 2020's emphasis on the physical, emotional, intellectual, ethical, and social development of learners (Ministry of Education, 2020)^[5]. Recent educational discussions have also explored Pancha Kosha in relation to holistic personality development, suggesting its potential relevance to contemporary educational practice (Nag & Majhi, 2025)^[6].

The interdisciplinary character of IKS is another important area of convergence with NEP 2020. IKS encompasses diverse fields including mathematics, medicine, agriculture, philosophy, arts, astronomy, and environmental knowledge, providing opportunities to connect different domains of learning (UGC, 2023a). This is consistent with NEP 2020's multidisciplinary orientation and its emphasis on flexible and integrated learning across disciplines (Ministry of Education, 2020)^[5].

The four *Ashramas* provide a conceptual perspective on education and personal development across different stages of life. Their association with learning, work, social responsibility, reflection, and self-development can be interpreted in relation to the contemporary principle of lifelong learning (Woo *et al.*, 2018)^[10]. However, this relationship is conceptual rather than evidence that the *Ashrama* framework directly informs the structure of NEP 2020. Taken together, the *pramāṇas*, Pancha Kosha, interdisciplinary dimensions of IKS, and *Ashrama* framework address complementary aspects of education: knowledge validation, holistic learner development, multidisciplinary learning, and lifelong development (Sharma, 2004; Woo *et al.*, 2018; Nag & Majhi, 2025)^[8, 10, 6]. Their convergence with NEP 2020 suggests that IKS can contribute to an educational framework combining knowledge, skills, values, well-being, critical thinking, and cultural rootedness (Ministry of Education, 2020)^[5]. However, the integration of IKS requires a critical and

evidence-based approach. IKS should not be introduced merely as cultural content; its integration should involve authentic sources, appropriate pedagogy, academic scrutiny, and alignment with contemporary scientific and disciplinary standards (UGC, 2023a, 2023b). Thus, the contribution of IKS to Indian education lies not in replacing contemporary knowledge systems but in critically integrating India's intellectual heritage with modern, multidisciplinary, and evidence-based education.

9. Educational and Policy Implications

9.1 Curriculum, Pedagogy and Multidisciplinary Learning

IKS can be incorporated into curricula through relevant knowledge traditions in mathematics, science, medicine, agriculture, philosophy, arts, and environmental studies. The epistemological principles associated with the Pramāṇas can provide conceptual support for observation, reasoning, comparison, inquiry, and experiential learning. These perspectives can be reflected through experiments, projects, discussions, field-based learning, and problem-solving activities, consistent with NEP 2020's emphasis on experiential, multidisciplinary, and critical learning (Sharma, 2004; Ministry of Education, 2020; UGC, 2023) ^[8, 5].

9.2 Holistic Development, Teacher Education and Lifelong Learning

The Pancha Kosha framework provides a perspective on the physical, mental, intellectual, and inner dimensions of learner development, while the Ashrama framework offers a broader perspective on learning and personal development across different stages of life (Nag & Majhi, 2025; Woo *et al.*, 2018) ^[6, 10]. These perspectives can support greater attention to well-being, values, creativity, self-awareness, skill development, and lifelong learning. Effective implementation also requires teacher preparation and professional development so that educators can understand relevant IKS traditions and apply them appropriately within contemporary educational contexts (Ministry of Education, 2020; UGC, 2023) ^[5].

9.3 Cultural Rootedness, Global Competence and Policy Implementation

The integration of IKS can strengthen learners' awareness of India's intellectual and cultural heritage while enabling engagement with contemporary and global knowledge. However, IKS should not be incorporated merely as additional cultural content. Its integration should be based on authentic sources, critical inquiry, appropriate academic standards, and evidence-based pedagogical practices (UGC, 2023). A balanced approach can therefore enable IKS to complement contemporary education by combining cultural rootedness, critical thinking, skills, values, and multidisciplinary learning (Ministry of Education, 2020) ^[5].

10. Challenges and Limitations

Although the integration of the Indian Knowledge System (IKS) into Indian education under the National Education Policy (NEP) 2020 offers important opportunities, its implementation involves several challenges. IKS

encompasses diverse philosophical, scientific, cultural, linguistic, and regional traditions; therefore, treating it as a homogeneous body of knowledge may overlook substantial differences among traditions and contexts. Its integration requires careful consideration of authenticity, relevance, historical context, and educational applicability (Ministry of Education, 2020; University Grants Commission, 2023) ^[5, 9]. A major challenge concerns the systematic development of curricula and learning resources. IKS should not be introduced merely as additional cultural content or isolated topics. Relevant knowledge traditions need to be selected, contextualized, and connected appropriately with contemporary disciplines and educational objectives. This also requires reliable texts, translations, scholarly interpretations, and pedagogically suitable materials. The availability and quality of such resources may vary across different areas of IKS, making careful academic curation important (Indian Knowledge Systems Division, 2025; University Grants Commission, 2023) ^[2, 9].

Teacher preparedness represents another important implementation challenge. Effective integration requires teachers to possess adequate understanding of relevant IKS traditions as well as the pedagogical skills necessary to connect them with contemporary learning practices. Limited teacher training, awareness, and access to appropriate resources may restrict meaningful classroom implementation. Similarly, experiential, interdisciplinary, value-based, and holistic approaches may require assessment practices that move beyond an exclusive emphasis on memorization and conventional written examinations (Ministry of Education, 2020; University Grants Commission, 2023) ^[5, 9]. The integration of IKS also requires an appropriate balance between traditional and contemporary knowledge systems. Traditional knowledge should be examined respectfully but should not automatically be presented as scientifically established without appropriate evidence. A critical and evidence-informed approach is therefore necessary, particularly where traditional claims require empirical examination. IKS should complement rather than replace contemporary scientific knowledge, with opportunities for comparative, interdisciplinary, and research-based inquiry (Ministry of Education, 2020; Indian Knowledge Systems Division, 2025) ^[5, 2]. There is also a risk of superficial integration if IKS is limited to the addition of a few traditional topics without corresponding changes in curriculum, pedagogy, teacher preparation, and learner engagement.

The present study is conceptual in nature and does not provide empirical evidence on the effectiveness or practical outcomes of integrating IKS into educational institutions. The relationships identified between IKS frameworks and NEP 2020 are therefore primarily conceptual and interpretive rather than empirically established. Further research involving teachers, students, educational institutions, curriculum developers, and policymakers will be necessary to assess the feasibility, effectiveness, and educational outcomes of IKS integration in different contexts. This limitation also indicates the need for future empirical studies to examine how the conceptual linkages identified in this paper can be translated into effective educational practices.

11. Conclusion

The integration of the Indian Knowledge System (IKS) into the remodeling of Indian education, as envisioned in the National Education Policy (NEP) 2020, provides a conceptual pathway towards a more holistic, multidisciplinary, value-oriented, and culturally rooted education system. The analysis presented in this paper highlights that IKS encompasses diverse perspectives on knowledge, human development, interdisciplinary learning, values, and lifelong learning that can be meaningfully related to the broader objectives of contemporary educational reform.

The six *Pramanas* provide an epistemological perspective on knowledge acquisition through perception, inference, comparison, verbal testimony, postulation, and non-perception. Their conceptual relevance to experiential learning, critical thinking, conceptual understanding, and inquiry-based learning demonstrates the potential of Indian epistemological traditions to inform contemporary pedagogical approaches. Similarly, the *Pancha Kosha* framework provides a holistic perspective on learner development by recognizing physical, vital, mental, intellectual, and inner dimensions of human development. The interdisciplinary dimensions of IKS further demonstrate the possibility of connecting diverse fields, including science, mathematics, medicine, yoga, philosophy, arts, agriculture, and environmental knowledge. The four *Ashramas* provide an additional perspective by presenting learning and human development as a continuous process extending across different stages of life. Together, these dimensions provide a conceptual framework for understanding education beyond the narrow acquisition of academic knowledge. The integration of IKS with NEP 2020 can therefore contribute to an educational system that seeks to combine traditional knowledge with contemporary scientific and pedagogical approaches. However, such integration requires systematic curriculum development, adequately prepared teachers, authentic learning resources, evidence-informed approaches, and a balanced relationship between traditional and modern knowledge systems. IKS should be incorporated critically and meaningfully rather than through superficial inclusion.

Ultimately, the integration of relevant dimensions of IKS with the objectives of NEP 2020 can support the development of an education system that is culturally rooted, multidisciplinary, experiential, value-oriented, and responsive to contemporary needs. Such an approach has the potential to contribute to the development of responsible, skilled, and socially aware citizens while strengthening the connection between India's knowledge heritage and the requirements of modern education.

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