Repositioning of Indian Knowledge Tradition in the New Education Policy (NEP-2020)

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Abstract:

The **National Education Policy (NEP) 2020** mandates a profound and transformative overhaul of the Indian education system, critically focusing on the **Indian Knowledge System (IKS)**—India's vast repository of intellectual, cultural, and scientific heritage.[1] This article provides an in-depth analysis of the rationale, specific policy provisions, and mechanisms designed for the **repositioning** of IKS, moving it from a peripheral, marginalized element to an integrated, mainstream component across all educational tiers.[2] The paper delves into the philosophical alignment of IKS with NEP's core goals of **holistic, multidisciplinary, and ethical education**, contrasting it with the colonial legacy that systematically diminished indigenous knowledge. Detailed examination is provided for the policy's directives regarding curriculum restructuring (including contributions in mathematics, astronomy, medicine, and linguistics), pedagogical transformation (emphasizing experiential learning and the *Guru-Shishya Parampara*), and institutional scaffolding (e.g., the IKS Division under AICTE and the National Research Foundation). Furthermore, the article undertakes a rigorous critical discussion on the formidable challenges to successful, authentic implementation, notably **curriculum standardization**, **teacher capacity building**, the risk of **misinterpretation or ideological bias**, and the imperative of maintaining **academic rigor**. The paper concludes that the successful integration of IKS is crucial for fostering national self-confidence and unique problem-solving capabilities, requiring a sustained, balanced, and evidence-based approach to bridge traditional wisdom with modern scientific inquiry.

Keywords:

NEP 2020, Indian Knowledge Systems (IKS), Holistic Education, Multidisciplinary, Cultural Heritage, Curriculum Integration, Guru-Shishya Parampara, Academic Rigor, Decolonization.

Introduction:

The Indian education system, for too long, has operated under a framework heavily influenced by colonial-era policies, resulting in a system often criticized for its rigidity, emphasis on rote learning, and a pervasive **marginalization of indigenous knowledge**.[3] While India possesses an ancient and vast intellectual tradition, the **Indian Knowledge System (IKS)**—encompassing sophisticated achievements in mathematics, philosophy, science, and arts—has largely been confined to the periphery of mainstream academic curricula. This

historical neglect has led to a cultural disconnect and a diminished sense of intellectual self-confidence among successive generations of educated Indians.

The promulgation of the **National Education Policy (NEP) 2020** marks a watershed moment, offering the first comprehensive structural and philosophical overhaul in over three decades. Unlike previous policies that sought incremental reforms, the NEP 2020 advocates for a fundamental shift, declaring that education must be profoundly **rooted in India's culture and ethos**. The policy explicitly aims to rectify the historical imbalance by asserting the value of the "rich heritage of ancient and eternal Indian knowledge and thought as a guiding light."

This article focuses on the specific provisions and mechanisms designed for the **repositioning of the Indian Knowledge Tradition (IKS)** within the NEP 2020. This endeavor is not merely a cultural revival; it is a strategic and academic move to leverage the inherent **holistic and multidisciplinary nature of IKS** to achieve the policy's goals of fostering **critical thinking, experiential learning, and holistic development**. We will analyze how the policy's mandates—from restructuring the school system with the **5+3+3+4 framework** to establishing dedicated institutional bodies like the **IKS Division under AICTE**—are intended to integrate IKS as a vibrant, mainstream component, thereby initiating a vital process of **intellectual decolonization**.[4] The following sections will critically dissect the policy's blueprint for IKS integration, its philosophical alignment, and the formidable implementation challenges that must be overcome to realize this transformative vision.

The Context of Civilizational Legacy:

India, historically known as a **'Vishwaguru'** (world teacher), possesses an enduring intellectual tradition spanning millennia. Knowledge production was centered in vibrant universities like Nalanda and Vikramshila and encompassed sophisticated fields from *Nyaya* (logic) and *Vyakarana* (grammar) to advanced metallurgy and surgical practices documented in *Sushruta Samhita*.[5] This tradition, often framed as *Bhāratiya Jñāna Paramparā*, provided a comprehensive, ethical, and integrated worldview.

The Scars of Colonial Education:

The introduction of the English Education Act of 1835, championed by Lord Macaulay, fundamentally altered the trajectory of Indian learning. The aim was to create a class of Indians "English in taste, in opinions, in morals, and in intellect," resulting in the systematic devaluation and eventual marginalization of indigenous knowledge systems. This colonial legacy persisted in post-independence educational policies, leading to a system that was largely Western-centric, fostering a cultural disconnect and an intellectual dependency among the educated elite.[6]

The NEP 2020 Mandate and Thesis Statement:

The **National Education Policy (NEP) 2020** directly confronts this historical deficit. It emphatically states that education must be **rooted in India's culture** and consciously informed by the "rich heritage of ancient and eternal Indian knowledge." This article posits that the NEP 2020's provisions for the Indian Knowledge System (IKS) represent a fundamental

philosophical and structural repositioning, aiming to decolonize the Indian educational mindscape and leverage IKS for contemporary problem-solving. This analysis will meticulously dissect the policy's framework for IKS integration, its philosophical underpinnings, and the critical implementation challenges necessary to achieve authentic academic inclusion.

1. Philosophical Underpinnings and Rationale for Integration:

The Concept of *Jñāna* and Holistic Education:

The policy's core objective of **holistic development** is intrinsically linked to the Indian concept of *Jñāna* (knowledge). In IKS, education (*Vidya*) was sought for liberation (*Sa Vidya Ya Vimuktaye*),[7] encompassing not just vocational skills but the development of a complete, ethical, and conscious individual. This contrasts sharply with a narrow, skills-for-the-market approach.

- **Ethical Framework:** IKS integration is intended to instill **constitutional values, human values, and social responsibility**, drawing from texts and traditions emphasizing *Dharma* (righteous conduct) and *Seva* (selfless service).

Multidisciplinarity: IKS as a Template:

The NEP 2020's most celebrated structural reform is the move towards **multidisciplinarity**, eliminating the rigid separation between Arts, Science, and Vocational streams. This concept is native to IKS:

- Ancient Indian texts were often **encyclopedic**, integrating mathematics, philosophy, poetry, and science.

- *Ayurveda* is a holistic system incorporating botanical science, pathology, surgery, dietetics, and psychology.

- The study of **Sanskrit and Indian languages** inherently links linguistics, philosophy, logic (*Nyaya*), and grammar (*Vyakarana*).[8] This section will detail how the inherent interconnections within IKS provide a **structural blueprint** for implementing NEP's multidisciplinary mandate

Cultivating *Bhāratiya Drishti* (Indian Perspective):

The integration aims to provide students with an intellectual and cultural anchor, fostering **national self-confidence** and a unique perspective (*Bhāratiya Drishti*) for addressing global issues. The policy emphasizes learning about India's past intellectual contributions to empower students to become innovators, rather than mere consumers of Western knowledge. This is a crucial element of the intellectual decolonization process.

Pedagogical Resonance: From Rote to Experiential Learning:

The policy's shift from **rote memorization** to **experiential, creative, and inquiry-based learning** finds historical justification in IKS pedagogies:

- **Guru-Shishya Parampara:** Emphasized direct, personalized interaction, dialogue, and practical application.

- **Traditional Arts and Crafts:** Learning was deeply practical, linking skills, mathematics, and aesthetics. The policy encourages the use of **traditional Indian games and storytelling** in the foundational stages to make learning contextually relevant and engaging.

2. Structural Integration in School Education:

The repositioning of IKS begins at the foundational level through the new 5+3+3+4 structure.

Foundational Literacy and Numeracy (FLN):

While FLN focuses on basic skills, the policy encourages using **context-specific content** drawing from local Indian traditions, folklore, and games to teach literacy and numeracy effectively, thus blending cultural context with learning goals.

Curriculum Mandates across Disciplines:

The new **National Curriculum Framework (NCF)** is the primary mechanism for embedding IKS.[9] This integration must be systematic and academically rigorous:

- **Mathematics and Astronomy:** Highlighting the contributions of figures like **Aryabhata, Brahmagupta, and Bhaskara II** (e.g., concept of zero, decimal system, calculus principles, spherical astronomy).

- **Science and Technology:** Inclusion of advanced concepts from IKS, such as:

  - **Metallurgy:** The engineering behind the Iron Pillar of Delhi, or traditional processes for wootz steel.

  - **Architecture and Urban Planning:** The principles of *Vastu Shastra* and the planning of Harappan cities.

  - **Health and Medicine:** Foundational principles of **Ayurveda** and traditional healing practices.

- **Social Sciences and Philosophy:** Mandatory study of India's classical literature, philosophy (including schools of *Darshana*), and ethical systems.

Language and Cultural Preservation:

- **Sanskrit:** Recognized as a "treasure house of knowledge" and one of India's greatest treasures. The policy strongly promotes Sanskrit, including it in school education at all levels, primarily due to its pivotal role as the language of classical IKS texts.

- **Mother Tongue/Local Language:** The push for instruction in the mother tongue up to Grade 5 is vital for cultural preservation, as much indigenous and tribal knowledge is stored in local dialects and oral traditions.[10]

Assessment Reform:

The new assessment center, **PARAKH**, is tasked with developing assessment tools that evaluate not just content knowledge but also **critical thinking and competencies** developed through experiential, holistic, and multidisciplinary learning—including the skills gained from IKS-related projects and vocational streams.

3. Repositioning in Higher Education and Research:

The integration of IKS in Higher Education (HE) aims to establish it as a viable field of specialization and advanced research.

Institutional and Regulatory Framework:

- **IKS Division under AICTE:** The most significant institutional mechanism is the establishment of the **Indian Knowledge Systems (IKS) Division** under the All India Council for Technical Education (AICTE). This division focuses on:

    o **Curriculum Development:** Creating mandatory modules and electives for engineering, management, and technical fields.

    o **Faculty Training:** Organizing training programs for technical educators to teach IKS content effectively.

    o **Documentation and Research:** Funding projects focused on authentic, contemporary application of IKS.

- **Integration Mandates:** The policy encourages all HEIs to establish strong IKS departments or centers and mandates that undergraduate students be offered opportunities to take **credit courses in IKS**, ensuring its presence in all degree pathways, including through the **Academic Bank of Credits (ABC).**[11]

Research and Innovation: The NRF and IKS:

The establishment of the **National Research Foundation (NRF)** is crucial for elevating IKS from cultural studies to a rigorous scientific field.

- **Empirical Validation:** The NRF is expected to fund interdisciplinary projects that seek **empirical validation and contemporary application** of IKS. Examples include:

    o Bio-profiling of traditional medicinal plants.

    o Applying principles of *Sthapatya Veda* (architecture) to modern sustainable construction.

- Using *Nyaya* and *Vaiśeṣika* logical frameworks in computational models and machine learning. [12]

- **Documentation and Digitalization:** Research funding must prioritize the large-scale **documentation, translation, and digitalization** of neglected manuscripts and oral traditions, making the IKS repository globally accessible and searchable.

Higher Education Curriculum and Pedagogy:

The principle of **Multiple Entry and Exit (MEE)** and multidisciplinary learning allows students greater scope to integrate IKS into their core studies. For example, an engineering student can opt for credits in Yoga or Ancient Indian Architecture, contributing to a more holistic transcript. This flexibility validates the academic standing of IKS subjects.

The Role of Universities and Clusters:

The policy's vision for large **multidisciplinary University Clusters** encourages collaboration between specialized IKS institutions (like Yoga or Sanskrit universities) and mainstream universities, ensuring that IKS resources are available to a wider student body.

4. Critical Challenges and Implementation Roadblocks:

The successful repositioning of IKS hinges on navigating complex practical, academic, and ideological challenges.

The Challenge of Authenticity and Academic Rigor:

The greatest risk is the potential for **unscientific or ideologically driven content** to be presented under the guise of IKS. To maintain the credibility of the entire initiative, there is an absolute necessity for:[13]

- **Rigorous Peer Review:** All IKS content integrated into the curriculum must undergo a stringent academic review process, utilizing historical evidence, scientific methodology, and archaeological/textual authenticity.

- **Avoiding Pseudo-Science:** The curriculum must clearly distinguish between philosophical concepts, historical claims, and empirically verifiable facts.

Capacity Building: Training the Educators:

The success of IKS integration is directly proportional to the competence of the teachers. Most current educators were trained in the previous, non-IKS-integrated system.

- **Massive Faculty Development:** There is an urgent need for massive, high-quality **Continuing Professional Development (CPD)** programs to train existing faculty in the principles, content, and pedagogy of IKS integration.

- **Pre-Service Reform:** Teacher education programs (the 4-year integrated B.Ed.) must be reformed to make IKS a mandatory component, ensuring future teachers are equipped with this knowledge.[14]

Resource Development and Diversity:

- **Lack of TLMs:** There is a significant scarcity of high-quality **Teaching-Learning Materials (TLMs)**, textbooks, and translated manuscripts suitable for contemporary classroom use across different grade levels and languages.

- **Inclusivity of Tribal Knowledge:** IKS must not be confined to Sanskrit texts; it must be inclusive of the rich **oral and indigenous knowledge systems of tribal and marginalized communities**, requiring dedicated documentation efforts.

Funding and Administrative Will:

The policy sets an aspirational target of **6% of GDP public expenditure on education**. Achieving this target is paramount, as the integration of IKS requires significant new funding for research, faculty training, documentation, and the establishment of new IKS-focused centres and infrastructure. Without sustained administrative and financial commitment, the IKS mandate risks remaining aspirational rather than achieving comprehensive implementation.

Conclusion:

The **NEP 2020** marks a decisive turn in India's educational trajectory, with the **repositioning of the Indian Knowledge Tradition** serving as its intellectual cornerstone. This initiative is far more than a cultural movement; it is a strategic maneuver designed to **decolonize the curriculum, foster indigenous innovation, and create a truly holistic educational model** that respects India's past while confidently facing the future.

The comprehensive framework—from the *5+3+3+4* structure to the institutional backing of the IKS Division and NRF—provides the necessary scaffolding for this transformation. However, the true measure of its success will lie in the implementation details: ensuring **academic authenticity and rigor**, developing a competent **teaching workforce**, and securing the necessary **financial resources**.

If executed diligently and honestly, ensuring a blend of traditional wisdom and modern scientific methodology, the NEP 2020's focus on IKS has the potential to produce a generation of Indians who are not only globally competitive but also **culturally anchored and ethically sound**. The ultimate goal is to evolve Indian education into a model that can contribute to global sustainable development and firmly establish India as a **knowledge hub** on the world stage.

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