



Integrating Indigenous Knowledge System in Redesigning Contemporary Teacher Education Programs through National Education Policy 2020

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Abstract- The Indigenous Knowledge System (IKS) provides a holistic and time-tested framework for education that emphasizes the complete development of an individual physically, mentally, emotionally, intellectually, and spiritually. In contrast to modern/contemporary education, which often prioritizes information transmission, ancient Indian education was rooted in transformation, character building, and self-realization. A truly transformative teacher education program must integrate foundational IKS concepts such as Panchakosh (the five sheaths of human personality) and Ashtanga Yoga (the eight-limbed path of self-discipline and realization). The Panchakosh model promotes integral development, from the physical body (Annamaya) to the blissful self (Anandamaya), while Ashtanga Yoga cultivates ethical behavior, emotional balance, mental clarity, and spiritual insight. Together, these frameworks support the creation of reflective, balanced, and values-driven educators. By infusing fundamental Indian thought, knowledge, tradition, art, skills, craftsmanship, and management into various sectors, India will undergo a philosophical revolution. According to IKS, teachers are not merely knowledge transmitters but gurus-mentors who guide students in inner awakening, ethical living, and social responsibility. The teacher is seen as a facilitator of self-realization and dharmic living, whose personal conduct and spiritual maturity greatly influence the learners. Integrating IKS into teacher education not only aligns with the National Education Policy 2020 (NEP 2020) but also re-establishes the role of teachers as nation builders and custodians of cultural and spiritual wisdom. This abstract advocates for a paradigm shift in teacher education from ignorance to enlightenment

Keywords: Indigenous Knowledge System, Panchakosh, Ashtanga Yoga, Teacher Education, National Education Policy 2020)

I. Introduction

India's intellectual tradition spans Vedas, Upanishads, Ayurveda, Yoga, Astronomy, Mathematics and the performing arts, fostering holistic development through self-realization and universal harmony. The indigenous education model rooted in 'Gurukula' pedagogy, emphasized experiential learning, values, and contextual knowledge.

“तत्कर्म यत्र बन्धाय सा विद्या या विमुक्तये।
आयासायापरं कर्म विद्यऽन्या शिल्पनैपुणम्॥“
सा विद्या या विमुक्तये

“True knowledge is that which liberates.”

IKS in education fosters multidimensional learning, connecting students to their environment, culture and universal ethics. Colonial education led to marginalization of traditional systems, reducing their presence in mainstream curricula. Marginalization



under colonial and post-independence regimes led to loss of content and context. NEP-2020 emphasis on IKS seeks to restore this balance, asserting that teacher training must reflect India's pluralistic heritage.

The epistemic pluralism of IKS is rooted in:

- Holistic health practices (Ayurveda and Yoga).
- Ecological wisdom (Agriculture and Conservation).
- Scientific innovations (Mathematics and Astronomy).
- Literary Arts (Storytelling, Theatre and Poetry).

NEP2020's blueprint for teacher education marks a paradigm shift with IKS at the center

Key directives include:

- Multidisciplinary curriculum - Bridging Science, Arts and Humanities through indigenous content.
- Language inclusion - Prioritizing mother tongue as a medium of instruction.
- Institutional support - Establishing centers for IKS research and dissemination.
- Professional integration - Recognizing indigenous experts and artisans as educational partners.
- Community immersion - Direct engagement with local knowledge bearers and practices.

Policy implementation involves:

- IKS modules and electives within B.Ed./M.Ed./teacher preparation programs.
- Project-based pedagogies (field visits, storytelling, yoga sessions, and Arts workshops).
- Credit recognition for experiential and community-based learning.
- Accreditation criteria revised to value IKS expertise.
- Knowledge and comfort cannot co-exist in pursuit.

NEP-2020's approach re-centers curricula around Indian context, ecological/societal needs and ethical values. This shift empowers future teachers to engage students with locally relevant, globally aware, and morally upright learning experiences.

II. Literature Review & Global Perspectives

Integration of indigenous wisdom in formal education is a global phenomenon. Maori pedagogy in New Zealand, Aboriginal education in Australia, Finland education system and Native American curriculum in the USA offer lessons in community involvement, language pride, values transmission, and sustainability. Studies show students thrive when education is culturally and geographically grounded.

India's NEP-2020 is inspired both by domestic heritage and successful international precedents.



Literature confirms that

Culturally responsive teaching enhances engagement and achievement. Place-based and experiential learning fosters ecological literacy. Teacher training in IKS improves cultural competence. The concept of “Panchkosh Vikas” is derived from the “Taittiriya Upanishad” and it explains the holistic development of human beings through five sheaths (Koshas) that cover the Atman. The first is the “Annamaya Kosha” , the physical body made of food (Anna). It develops through proper diet, yoga and exercise. According to the Upanishad “अन्नं ब्रह्मेति व्यजानात् ”, meaning food is Brahman . The second is the “Pranamaya Kosha” , the vital energy sheath that governs breathing and life processes, developed through pranayama and regulation of energy. The third is the “Manomaya Kosha” , the mental sheath, which represents thoughts, emotions and desires. Its development occurs through meditation, moral discipline and mantra chanting. The fourth is the “Vijnanamaya Kosha ”, the intellectual sheath, which symbolizes wisdom and discrimination (viveka) . It is enriched by scriptural study, reflection and Satsang . The fifth and innermost is the “Anandamaya Kosha” , the bliss sheath, closest to the Atman, representing joy and peace. It develops through bhakti, meditation, selfless service and self-realization. Thus, Panchkosh Vikas means growth at physical, vital, mental, intellectual, and spiritual levels, leading to the realization of the supreme truth that Atman is one with Brahman. This concept emphasizes total personality development and inner harmony.

“Ashtanga Yoga” is a spiritual discipline explained by Maharishi Patanjali in the Yoga Sutras. The term “Ashtanga” means “eight limbs” which serve as a complete path for self-purification and union with the divine. Maharishi Patanjali defines Ashtanga Yoga by below mentioned shloka

यम नियमासन प्राणायाम प्रत्याहार धारणा ध्यान समाधयोऽष्टावङ्गानि
॥(यमनियमासनप्राणायामप्रत्याहारधारणाध्यानसमाधयोऽष्टावङ्गानि)॥” (Yoga Sutra 2.29)
Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi are the eight limbs of Yoga.

The eightfold path of Ashtanga Yoga comprises progressive ethical, physical, mental, and spiritual practices. The first limb, Yama, prescribes moral restraints such as nonviolence, truthfulness, non-stealing, chastity, and non-attachment. The second limb, Niyama, emphasizes observances including purity, contentment, austerity, self-study, and devotion to God. The third limb, Asana, cultivates bodily steadiness and health. The fourth, Pranayama, regulates breath and harmonizes vital energy. The fifth limb, Pratyahara, entails the withdrawal of the senses from external distractions. The sixth, Dharana, involves sustained concentration on a single object. The seventh, Dhyana, is the practice of meditation that produces mental clarity and inner tranquility. The eighth and final limb, Samadhi, denotes a state of complete absorption in which the self apprehends unity with Brahman.

Consequently, Ashtanga Yoga should be understood not merely as a set of physical exercises but as a holistic system integrating ethical conduct, physical well-being, cognitive discipline, and spiritual awakening, ultimately oriented toward liberation (moksha).



The Panchkosh vikas

Image credit: - Emily Cronkleton, December 1, 2020

<https://www.healthline.com/health/mental-health/koshas>

Objective of the study

- To study the relevance of Indigenous Knowledge Systems in contemporary teacher education.
- To explore the educational implications of Panchakosh and Ashtanga Yoga for holistic teacher development.

III. Methodological Approaches

Stories constitute a potent pedagogical medium for conveying knowledge across diverse domains. Contemporary discourse frequently employs narratives to frame and examine real-world problems; for example, case-based pedagogy in business, schools uses story-like descriptions to analyze complex situations and evaluate alternative decisions. A paradigmatic instance of narrative pedagogy in the South Asian tradition is the Panchtantra , an anthology of animal fables traditionally attributed to Viṣṇuśarman.

The origin narrative of the Panchtantra illustrates how storytelling was mobilized to transmit practical wisdom. According to the tradition, King Amarasakti had three sons who were refractory to conventional learning and unfit for statecraft. He therefore appointed Viṣṇuśarman to educate them rapidly in governance. Finding the princes unwilling to study the Sastras directly, Viṣṇuśarman devised an alternative instructional strategy based on illustrative tales. The resulting compilation comprises five Tantras (books) containing stories that address governance, social conduct, ethics, and practical morals. Collectively, these texts circulated widely under the title Panchtantra and are routinely cited within the genre of Niti-sastra (texts on practical wisdom and polity).

Effective IKS integration in teacher preparation necessitates diverse methodologies:

- Participatory and inquiry based learning, i.e., teachers as co-learners.
- Action research- Field studies on indigenous practices, documentation of oral histories.
- Problem based assignments inspired by local challenges (e.g. water conservation, medicinal plants, folk arts).
- Portfolio assessment for capturing community engagement, value reflection and interdisciplinary exploration.
- Peer teaching and collaborative design with indigenous practitioners and community elders.
- Evaluation methods should honor both formal academic standards and indigenous epistemic practices.
- Rubrics for experiential knowledge, creativity and ethical reasoning
- Self and peer review reflecting community feedback.
- Longitudinal tracking of teacher competence in IKS domains.



There are six kinds of teachers: inspirer, indicator, orator, demonstrator, educator, and enlightener.

प्रेरकः सूचकश्चैव वाचको दर्शकस्तथा।
शिक्षको बोधकश्चैव षडेते गुरवः स्मृताः॥

Policy, curriculum and community involvement must converge for sustained impact of IKS in teacher education.

Methodology is anchored in respect, context and creativity, transforming teacher education from rote transfer to life-oriented wisdom.

हिरण्मयेन पात्रेण सत्यस्यापिहितं मुखम्।
तत् त्वं पूषन्नपावृणु सत्यधर्माय दृष्टये॥

The “face of Truth” (सत्यस्य मुखम्) represents Brahman, the ultimate Reality. The “golden vessel” (हिरण्मयेन पात्रेण) symbolizes the dazzling brilliance of illusion (Maya), ego and ignorance that hides this Truth from ordinary perception.

Just as the seeker prays to Puṣan (Sun God) to remove this covering so that the eternal Truth may be seen, similarly the Guru performs this role for the disciple.

The Guru is the one who removes the golden veil of ignorance through Upadesa (teaching), Jnana (knowledge), and Anugraha (grace).

IV. Case Studies & Exemplars

Kerala’s Kalamandalam integrates performing arts and folk traditions into teacher training, thereby enhancing cultural pride and creativity among educators. In Andhra Pradesh, government schools involve local healers in teaching medicinal plants and Ayurveda, linking schooling with indigenous ecological and medical knowledge. Tribal districts in Madhya Pradesh have reported higher school attendance and improved retention after incorporating community storytelling and folk music as integral parts of the curriculum. Under the Ministry of Education, the Indian Knowledge Systems (IKS) Division partners with IITs to develop teacher training modules on Vedic mathematics, traditional sciences, and ethical discourse, with pilot studies indicating enhanced teacher engagement, deeper student understanding, and greater community participation. Together, these initiatives highlight the effectiveness, contextual relevance, and transformative potential of IKS-based teacher education.

Challenges & Barriers

- Lack of documented, standardized resources for formal curriculum building.
- Insufficient faculty trained in IKS methods.
- Epistemological bias favoring Western knowledge systems.
- Administrative inertia and funding constraints.
- Resistance to change among educators and policymakers.



Translating oral and community-based traditions into structured academic content is complex. Ensuring fidelity and sensitivity in adaptation is vital. Continuous advocacy, faculty development and policy support are essential to overcome these barriers. With concerted effort, these challenges can be navigated, opening space for IKS within mainstream teacher education.

Opportunities & Impact

- IKS integration promises multiple positive outcomes:
- Restoration of cultural identity and pride.
- Enhancement of teacher and student engagement via contextual content.
- Sustainable development - Ecological awareness, local solutions.
- Value-based education fostering ethical citizenship.
- Increased global competitiveness through creative, interdisciplinary training.

NEP-2020's vision aligns with UNESCO's call for education as a tool for peace, equity and sustainability. India can set an example for culturally-rooted contemporary pedagogy, influencing broader international education discourse. With bold steps; teacher education can catalyze holistic, future-focused transformation.

Recommendations

- Institutionalize IKS as a core component of teacher training accreditation.
- Allocate dedicated funding for research, curriculum development and community partnerships.
- Recruit and empower indigenous experts as educators and mentors.
- Establish digital archives, resource centers and open-access materials on IKS.
- Encourage interdisciplinary capstone projects connecting IKS with STEM and humanities.

V. Conclusion

IKS is not merely vestiges of the past but constitute a dynamic and evolving framework that guides contemporary and future educational practices. Rooted in centuries of lived experience, ecological wisdom, and ethical reflection, IKS embody the soul of Indian education by harmonizing tradition with present-day societal and pedagogical needs. In this sense, education is conceptualized not only as the acquisition of abstract knowledge but as an integrative process of character building, the moral upliftment of humanity, and the cultivation of harmonious relations with nature and society. National Education Policy 2020 (NEP2020) articulates an explicit vision for embedding IKS into teacher preparation, positioning it as a timely and transformative mandate rather than a symbolic gesture. Through a holistic, context-sensitive, and value-driven approach, teacher education nurtures educators as stewards who mediate between ancient wisdom and modern scientific and technological innovation.

“आ नो भद्राः क्रतवो यन्तु विश्वतः”

Above mentioned classic Sanskrit Sloka says about the rich oral traditions, and experiential learning facilitated by community elders and local experts increasingly



resonate within the restructured landscape of teacher education. Such practices foreground situated knowledge, intergenerational dialogue, and pedagogies grounded in learners' cultural and ecological contexts. By formally recognizing and advancing IKS, Indian education can emerge as a beacon for ethical, sustainable, and culturally grounded models of learning that are relevant far beyond national borders. In the present context of global environmental crises and educational homogenization, IKS-infused teacher preparation offers a corrective. It re-centers local epistemologies, promotes pluralistic worldviews, and strengthens democratic, place-based pedagogy. Thus, with sustained institutional commitment and scholarly rigor, NEP-2020 and Indigenous Knowledge Systems together hold the potential to fundamentally redefine the future of teacher education in India, positioning it as an inclusive, socially responsive, and spiritually reflexive endeavor.

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