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W37: Integrating Indian Knowledge Systems (IKS) in Higher Education: Revitalizing Cultural Roots and Enhancing Learning Outcomes

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Abstract: Indian Knowledge Systems (IKS) represent a comprehensive body of indigenous knowledge developed over millennia, spanning science, philosophy, medicine, art, and governance. There is growing recognition of the need to integrate IKS into higher education to create a more inclusive, holistic, and culturally grounded learning environment. This paper examines the historical foundations, interdisciplinary relevance, and pedagogical potential of IKS in modern academia. It argues that integrating IKS enhances learning outcomes, fosters critical thinking, sustainability, and cultural identity among students. The paper further explores implementation strategies, challenges, and future directions, aligning with the National Education Policy 2020.

Keywords: Indian Knowledge Systems, Higher Education, Interdisciplinary Learning, Cultural Heritage, Sustainability, Pedagogy

1. Introduction

Education is not merely the transmission of information but a process of shaping individuals and societies. In India, traditional systems of knowledge have long emphasized holistic development — integrating intellectual, ethical, and spiritual dimensions. However, colonial and post-colonial education systems frequently marginalized indigenous knowledge, privileging Western epistemologies over local traditions. The consequences have been far-reaching: students disconnected from their roots, erosion of cultural memory, and the loss of intellectual traditions that flourished for millennia. IKS offers an alternative paradigm rooted in experiential learning, sustainability, and interconnectedness. With increasing globalization and pressing challenges — climate change, mental health crises, and cultural homogenization — there is renewed interest in revisiting these traditions. Integrating IKS into higher education can provide students with a more balanced and contextually relevant learning experience while fostering innovation and critical inquiry. The National Education Policy (NEP) 2020 has explicitly recognized the importance of IKS, signaling a major shift in educational philosophy and providing institutional momentum for systemic change. This paper explores the historical context, contemporary relevance, benefits, challenges, and strategic pathways for embedding IKS into Indian higher education.

2. Historical Context of Indian Knowledge Systems (IKS)

IKS has evolved through centuries of intellectual inquiry, experimentation, and cultural exchange. Far from being a static repository of ancient wisdom, it represents a living tradition of knowledge-making that responded dynamically to new circumstances and discoveries.

2.1 Science and Mathematics: Ancient India made pioneering contributions that fundamentally shaped global intellectual history:

- **Mathematics:** The invention of zero and the decimal system revolutionized mathematics and laid the groundwork for modern computational systems. Scholars such as Aryabhata and

Brahmagupta advanced algebra, geometry, and trigonometry centuries before their European counterparts.

- **Medicine:** Ayurveda provided a holistic system of medicine focused on prevention and balance. The Sushruta Samhita documented advanced surgical techniques, including:
 - Rhinoplasty (reconstruction of the nose)
 - Cataract surgery using specialized instruments
- **Metallurgy:** The Iron Pillar of Delhi stands as a remarkable testament to ancient engineering precision:
 - It has resisted corrosion for over 1,600 years
 - Its composition and craftsmanship continue to astonish modern metallurgists

2.2 Philosophy and Spirituality: Indian philosophical traditions explore metaphysical, ethical, and epistemological questions with remarkable sophistication. Vedanta emphasizes the unity of existence and the relationship between individual consciousness and universal reality. Yoga integrates physical and mental disciplines into a comprehensive system of self-development. Buddhist and Jain philosophies contributed ideas of non-violence, mindfulness, and ethical living that continue to resonate globally. Logical schools like Nyaya developed rigorous frameworks for reasoning and debate, illustrating the analytical depth and epistemological seriousness of Indian thought.

2.3 Art and Architecture: Indian art forms embody spiritual and aesthetic principles deeply integrated with mathematical precision and philosophical meaning. Classical music systems — Hindustani and Carnatic — rest on a sophisticated theory of raga linking musical form, time, season, and emotional experience. Dance traditions such as Bharatanatyam and Odissi encode narratives and devotional concepts through a complex grammar of gesture and movement. Temple architecture reflects a synthesis of artistic expression and scientific precision, encoding cosmological principles in stone. Sites like Ajanta and Ellora reveal cultural richness and technical mastery of an extraordinary order.

2.4 Education Systems: The Gurukul system emphasized holistic education, character building, and experiential learning through close mentorship and community living. It was not merely a vehicle for the transfer of information but a comprehensive system for the formation of persons. Ancient universities such as Nalanda and Takshashila were global centers of learning, attracting scholars from across Asia and offering instruction in medicine, logic, mathematics, philosophy, and statecraft. Their destruction represents an irreplaceable loss to human civilization, and efforts to recover and revitalize this intellectual heritage remain urgently important.

3. Relevance of IKS in Contemporary Higher Education

In the 21st century, education must address complex global challenges while remaining culturally rooted. The dominant Western model, despite its strengths, has not consistently fostered the kind of holistic, ethically grounded, and environmentally conscious thinking that contemporary crises demand. IKS provides a complementary framework, offering insights that are both locally meaningful and globally relevant.

The holistic learning ethos of IKS integrates cognitive, emotional, and ethical dimensions — an integration that modern educational psychology increasingly recognizes as essential for deep

learning and personal development. Contextual relevance connects study to local traditions and lived realities, making education more meaningful for students who might otherwise experience their learning as disconnected from life. At the same time, IKS principles such as sustainability, mindfulness, and non-violence carry universal applicability and contribute meaningfully to global conversations about how humanity should live.

Integration also aligns with contemporary educational goals of inclusivity, diversity, and innovation. In a globalized academy where non-Western traditions have long been undervalued, bringing IKS into the curriculum is an act of intellectual justice as well as pedagogical enrichment. It widens the range of perspectives available to students and helps them think more creatively and critically across disciplinary and cultural boundaries.

4. Benefits of Integrating IKS in Higher Education

4.1 Cultural Relevance and Identity: Incorporating IKS helps students reconnect with their heritage, fostering pride and cultural awareness. When students encounter their traditions as subjects of serious academic study — rather than as folklore from a pre-modern past — they develop a more nuanced and confident sense of identity. This cultural grounding, far from fostering parochialism, equips students to engage with global cultures on more equal and self-assured terms.

4.2 Interdisciplinary Learning: IKS inherently transcends disciplinary boundaries. Ayurveda combines biology, chemistry, ecology, and philosophy; traditional architecture integrates art, engineering, mathematics, and environmental science; classical music theory bridges acoustics, mathematics, psychology, and aesthetics. Such integration naturally promotes critical thinking, problem-solving, and the kind of synthetic intelligence modern employers increasingly demand. As universities move toward interdisciplinary models, IKS offers a rich resource for structuring genuinely integrated learning experiences.

4.3 Sustainability and Environmental Ethics: Traditional Indian practices emphasize harmony with nature and the ethical responsibility of human beings toward the natural world. Concepts such as Vasudhaiva Kutumbakam — the world as one family — and the principle of ecological balance embedded in ancient land management, water conservation, and agricultural practices can directly inform contemporary sustainable development thinking. At a time when environmental crisis demands a fundamental rethinking of the human relationship with nature, IKS offers not just philosophical principles but practical techniques refined over centuries.

4.4 Innovation and Creativity: Blending traditional knowledge with modern science can produce innovative solutions that neither tradition could generate alone. Traditional agricultural methods can inspire sustainable farming practices suited to local conditions. Ayurvedic pharmacology is informing cutting-edge research into herbal medicine and drug discovery. Vastu Shastra principles are being revisited for insights into energy-efficient building design. Students equipped with both modern scientific methods and traditional knowledge frameworks are well positioned to generate genuinely novel syntheses.

4.5 Mental and Emotional Well-being: Practices like yoga and meditation contribute to mental health, stress management, and overall well-being — a growing concern among university students worldwide. The mental health crisis in higher education calls for responses that go beyond conventional counseling services. Incorporating contemplative practices rooted in IKS can offer

students practical tools for self-regulation, self-awareness, and resilience. Many universities globally have already begun offering yoga and mindfulness programs, often drawing on Indian traditions, though not always acknowledging their origins.

5. Integration of IKS Across Disciplines

5.1 Science and Technology: IKS can enrich scientific education by introducing knowledge systems such as Ayurveda, yoga, and indigenous agricultural practices. These complement modern research by offering alternative methodologies, different frameworks of causality, and a wealth of empirical observations accumulated over centuries. The goal is genuine intellectual dialogue between traditional and modern paradigms rather than simply treating traditional knowledge as raw material to be validated or dismissed by modern science.

5.2 Humanities and Social Sciences: Courses in philosophy, ethics, and cultural studies can incorporate Indian texts and traditions to provide diverse perspectives on human behavior and society. Indian logic, epistemology, political thought, jurisprudence, and social theory offer rich resources for understanding and critiquing modern institutions. Engaging with these traditions moves the humanities beyond the predominantly Western canon and helps students think from within multiple intellectual frameworks.

5.3 Management and Commerce: Principles from ancient texts — including ethical leadership, sustainable economics, and community-centered governance — can productively inform modern business practices. Gandhian economics emphasizes simplicity, social responsibility, and human dignity over profit maximization, speaking directly to contemporary debates about corporate ethics. Kautilya's Arthashastra offers sophisticated analysis of statecraft, economic policy, and organizational management that reads productively alongside modern management theory.

5.4 Arts and Design: Incorporating traditional crafts, aesthetics, and design principles can enhance creativity and cultural appreciation in art and design education. India's rich tradition of textile, pottery, jewelry, and architectural design embodies sophisticated knowledge of materials, techniques, and aesthetic principles. Design education that connects students to these traditions equips them with a unique creative vocabulary and a deeper understanding of the relationship between function, meaning, and beauty.

6. Pedagogical Approaches for IKS Integration

Effective integration of IKS requires innovative teaching methodologies that respect the distinctive character of traditional knowledge while making it intellectually engaging for contemporary students. Experiential learning — through field visits, workshops, and practical applications — allows students to encounter IKS as a living tradition rather than a museum artifact. Collaborative, interdisciplinary projects combining traditional and modern knowledge can generate new insights and model the kind of synthetic thinking that IKS integration is designed to foster. Encouraging direct engagement with primary texts — in Sanskrit and regional languages, with translation support where necessary — allows students to encounter IKS on its own terms. Blended learning approaches combining digital tools with traditional methods can expand access while preserving the depth of traditional pedagogical relationships. Such approaches ensure that IKS is treated not as static knowledge but as a dynamic and evolving field of inquiry that rewards sustained intellectual engagement.

7. Implementation Strategies

7.1 Curriculum Development: Universities can introduce dedicated IKS courses or integrate relevant content into existing subjects across the curriculum. The University Grants Commission (UGC) has developed guidelines and model curricula for IKS integration, providing a useful starting point. Departments should identify the most relevant entry points within their existing programs and develop materials that genuinely illuminate connections between traditional and contemporary knowledge, rather than simply appending IKS as a peripheral addition.

7.2 Faculty Training: Teachers need orientation and training to deliver IKS content with the depth and nuance it deserves. Most faculty members educated under the existing system will have limited exposure to IKS. Dedicated professional development programs — workshops, visiting expert lectures, and collaborative research opportunities — are therefore essential. Building a community of IKS scholars and educators who support one another and share resources is equally important for sustaining long-term momentum.

7.3 Research and Innovation: Encouraging interdisciplinary research on IKS can generate new knowledge, applications, and syntheses. Funding agencies should prioritize research that brings traditional knowledge into productive dialogue with contemporary scientific and humanistic inquiry. Documenting and digitizing traditional knowledge repositories — manuscripts, oral traditions, craft knowledge, and agricultural practices — is also an urgent scholarly priority before irreplaceable knowledge is lost.

7.4 Institutional Collaboration: Partnerships with traditional knowledge holders, research institutions, and cultural organizations can greatly enrich academic programs by bringing practitioners' knowledge into the classroom. Such collaborations also model the kind of respectful, mutually beneficial relationship between academic institutions and knowledge communities that IKS integration should embody. Universities can serve as bridges between traditional knowledge communities and broader society.

8. Challenges in Integrating IKS

8.1 Standardization and Academic Rigor: Ensuring academic rigor while respecting the distinctive character of traditional knowledge requires careful thought about evaluation frameworks developed for different purposes. There is a risk of either distorting traditional knowledge by forcing it into inappropriate academic molds, or of treating it so reverentially that it escapes critical scrutiny.

8.2 Resource Constraints: Many traditional texts remain untranslated or available only in expensive academic editions, and relatively few scholars combine genuine expertise in IKS with the pedagogical skills needed to teach it effectively. Building this scholarly infrastructure is a long-term endeavor requiring sustained investment.

8.3 Perception and Attitudinal Barriers: Some students, faculty, and administrators — often shaped by colonial educational discourse — view IKS as outdated or unscientific. Overcoming this requires patient engagement with evidence of IKS's intellectual richness and practical relevance, alongside honest acknowledgment of the genuine limitations of any knowledge tradition.

8.4 Language Barriers: Many foundational texts are in Sanskrit or regional languages, requiring either extensive translation programs or language education that most students currently lack. This remains one of the most practical and immediate obstacles to broad and meaningful IKS integration.

9. Case Studies and Practical Applications

9.1 Ayurveda in Medical Education: Incorporating Ayurvedic principles alongside modern medicine can promote integrative healthcare approaches that address limitations of exclusively biomedical models. Integrative medicine programs at institutions like AIIMS and several private universities are beginning to explore how Ayurvedic diagnostics, herbal pharmacology, and preventive health practices can complement modern clinical medicine — provided this is done in a rigorous and evidence-informed way.

9.2 Yoga in University Programs: Many institutions now include yoga and mindfulness courses to enhance student well-being, and growing evidence supports their effectiveness in reducing stress and improving academic performance. Some universities offer full academic programs in yoga studies encompassing its philosophical, historical, and textual dimensions alongside practical training — a model for how IKS can be integrated as both a subject of intellectual study and a lived practice.

9.3 Traditional Crafts in Design Education: Design schools in India and internationally are increasingly integrating indigenous crafts to promote sustainable and culturally rooted design. Collaborations between design students and traditional craftspersons expose students to sophisticated material knowledge and aesthetic frameworks unavailable in any textbook. Such partnerships also create economic opportunities for craft communities and help sustain living traditions that might otherwise be lost.

10. Future Directions

10.1 Policy Support: The future of IKS in higher education depends on strategic initiatives spanning policy, technology, international collaboration, and community engagement. Policy support is foundational: the implementation of frameworks aligned with NEP 2020's emphasis on IKS must be backed by adequate funding, institutional mandates, and accountability mechanisms. Without genuine institutional commitment, IKS integration risks remaining a marginal addition rather than a transformative reorientation of educational philosophy.

10.2 Digital Resources: Digital platforms offer enormous potential for expanding access to IKS resources. Online courses, digitized manuscript collections, and virtual visits to heritage sites can make IKS accessible to students and scholars who would otherwise have no contact with these traditions. International collaboration can position India as a global leader in holistic and sustainable education while benefiting from scholarly perspectives on traditional knowledge systems in other cultural contexts.

10.3 Community engagement: Genuine partnership with local practitioners, knowledge holders, and cultural communities — in teaching, research, and curriculum development — lies at the heart of meaningful IKS integration. Weavers, farmers, physicians, musicians, and architects do not merely supplement academic knowledge; they are custodians of irreplaceable expertise that no textbook or university course can fully replicate.

11. Conclusion

Integrating Indian Knowledge Systems into higher education is not merely an academic exercise but a cultural and intellectual necessity of our times. It offers a pathway to create a more inclusive, holistic, and innovative educational system that respects tradition while embracing modernity. By

bridging ancient wisdom and contemporary knowledge, IKS can enrich learning experiences, foster critical thinking, and contribute meaningfully to global conversations about sustainability, well-being, and the future of human civilization.

The challenges are real but not insurmountable. With sustained commitment from policymakers, educators, researchers, and communities, IKS can be woven into the fabric of Indian higher education in ways that are intellectually rigorous, pedagogically effective, and genuinely transformative. The goal is not to replace modern education with a romanticized vision of the past, but to create a richer intellectual culture in which multiple ways of knowing are valued, connected, and brought to bear on the urgent challenges of our time. The revitalization of India's intellectual heritage in the academy is an act of cultural justice, a contribution to global knowledge, and a gift to future generations.

Bibliography

- ✓ Altekar, A. S. (1944). *Education in Ancient India*. Nand Kishore & Bros.
- ✓ Das, S. K. (2019). *Indian Knowledge Systems: A Study*. Routledge.
- ✓ Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- ✓ Krishna, D. (2011). *Contestation and Dialogue: Studies in Indian Philosophy*. Oxford University Press.
- ✓ Frawley, D., & Lad, V. (2001). *Yoga and Ayurveda: Self-Healing and Self-Realization*. Motilal Banarsidass.
- ✓ Pattanaik, D. (2013). *Indian Mythology: Tales, Symbols, and Rituals*. Inner Traditions.
- ✓ Singh, R. (2017). Indian Knowledge Systems. *Journal of Indian Education*, 43(2), 1–12.
- ✓ UNESCO. (2017). *Sustainable Development Goals and Indian Knowledge Systems*.

About SLU College

Shree Lalshankar Umiyashankar Arts and Harivadan & Padmaben Thakore Commerce College for Women, which was established in 1920 as an endeavour of Gujarat Stree Kelvani Mandal, has the proud privilege of being the first women's college in Ahmedabad. The college is recognised under Section 2 (f) and 12 (b) of UGC Act 17th June, 1972. The college runs various programmes in affiliation with Gujarat University such as - B.A., B.Com., and M.Com. The BS-BBA programme was added from the academic year 2025-2026. The college also runs several add-on programmes like Fashion Design and Computer Courses at the ICTC centre located at the SLU Campus.

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