

PAPER ID: 20260201045

# Role of Indian Knowledge System in Shaping the Future of the Current Generation

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**Abstract:** The Indian Knowledge System (IKS), which spans philosophy, physics, medicine, ecology, mathematics, linguistics, the arts, and governance, is an integrated, comprehensive body of knowledge that has been generated over millennia in the Indian subcontinent. IKS provides alternative paradigms for sustainable development and human well-being in the modern period of swift technological progress, mental health issues, and environmental disasters. The importance of IKS in influencing the current generation's intellectual, moral, social, and economic future is critically examined in this study article. The study assesses how IKS is incorporated into frameworks related to education, technology, sustainability, and mental health using policy data, institutional statistics, and qualitative analysis. In addition to highlighting issues with standardisation and scientific validation, the results show that the methodical integration of IKS improves holistic learning, cultural identification, innovative ability, and sustainable thinking.

**Keywords:** Indian Knowledge System, NEP 2020, Education Reform, Sustainable Development, Youth Development, Indigenous Knowledge

**1. Introduction:** Over the course of several millennia, the Indian subcontinent has developed a broad, dynamic, and interrelated intellectual legacy that is represented by the Indian Knowledge System (IKS). Philosophy, the natural sciences, mathematics, astronomy, languages, medicine (including Ayurveda and kindred systems), the arts, ethics, governance, and social organisation are just a few of the many fields it covers. IKS sees knowledge as an integrated whole, where discoveries from one area inform and enhance understanding in others, as opposed to seeing these domains as distinct disciplines. A worldview that acknowledges the unity of nature, society, and the human is reflected in this interconnectedness.

IKS's holistic approach to education is one of its distinguishing features. IKS places more emphasis on synthesis, context, and lived experience than many Western epistemological frameworks, which have a tendency to divide knowledge into distinct subjects. Learning is intimately related to self-improvement, moral behaviour, and societal duty rather than just being the acquisition of knowledge. Ideas like *vidyā* (knowledge), *prajñā* (wisdom), and *ikṣā* (learning) show a transition from intellectual comprehension to practical wisdom. As a result, education is viewed as a transformative process that moulds both competence and character.

IKS's experience and value-based perspective is another essential component. In addition to logic and textual authority, knowledge is also verified by practice, observation, introspection, and discussion. In order to ensure that knowledge promotes both individual development and society well-being, ethical principles like *dharma* (good conduct), *satya* (truth), and *ahimsa* (non-violence) are essential to the learning process. By addressing issues of meaning, purpose, and interconnectivity, spiritual inquiry enhances rather than detracts from rational cognition.

IKS is still relevant now because of the worldwide issues that contemporary educational systems must deal with, such as social injustice, environmental degradation, mental health issues, and moral conundrums brought on by quick technology

development. Technology-driven education has improved access and efficiency, but it frequently lacks moral orientation and cultural roots. Alternative paradigms that prioritise sustainability, harmony with environment, inclusion, and community-centered development are provided by IKS. IKS offers a framework for education that is not only innovative but also culturally grounded, socially responsible, and capable of producing well-rounded individuals capable of addressing the complexities of the modern world by fusing traditional wisdom with contemporary scientific and technological advancements.

The Indian Knowledge System (IKS) is an epistemological paradigm derived from basic sources like the Vedas, Upanishads, Darśanas, classical sciences, Ayurveda, and local indigenous sciences. It is more than just a collection of old books and activities.

This all-encompassing perspective is in contrast to contemporary educational institutions, which frequently place more emphasis on knowledge acquisition than on existential comprehension or moral reasoning. With historical educational establishments like Takshashila, Nalanda, and Vikramashila acting as international hubs for multidisciplinary education, IKS has developed over thousands of years. Long before comparable advancements in other areas, the system combined mathematics, astronomy, medicine, linguistics, and logic. According to recent research, there are lessons for sustainability, ethics, and cognitive diversity when this knowledge is carefully evaluated and contextualised.

## 2. Review of Literature

### Policy Emphasis on IKS Integration

IKS integration into formal education is highlighted in the National Education Policy (NEP) 2020, which emphasises multidisciplinary learning that places traditional Indian sciences—such as Ayurveda, Yoga, Sanskrit, mathematics, and astronomy—alongside contemporary curriculum disciplines. A system that connects traditional knowledge with modern

learning objectives is what NEP 2020 proposes.

### Awareness and Readiness of Teachers

Pre-service and in-service teachers were surveyed about IKS integration in STEM education in a significant quantitative study. The findings indicate that instructors have high favourable attitudes towards the relevance of IKS (Mean = 43.2, SD = 5.7) but intermediate awareness (Mean = 32.8, SD = 6.4). There was a moderately positive connection ( $r = .46, p < .01$ ) between awareness and actual teaching behaviours, and in-service instructors showed considerably higher awareness than pre-service cohorts ( $t = 3.42, p < .01$ ). This suggests that attitudinal positivity does not directly translate into classroom practice, largely due to gaps in curriculum materials and pedagogical strategies.

### Implementation Scale in Higher Education

38 IKS courses have been established in 12 institutions across fields like mathematics, astronomy, aesthetics, logic, and management, according to government implementation data. There are currently 88 interdisciplinary research projects in progress, 5,527 IKS internships, and more than 50 workshops and conferences. IKS components have been adopted by more than 8,000 HEIs, and 150,000 texts pertaining to these traditions have been digitised. With aspirations to grow to 10,000 academics and 1,000 research scholars, faculty capacity initiatives include training for 1,000 faculty members and 200 master trainers.

Although institutional penetration varies by area and field, this evidence indicates that IKS is moving from policy to practice.

## 3. Data Analysis Themes and Findings

### 3.1 Awareness vs. Classroom Implementation

Positive sentiments towards IKS coexist with little classroom integration, according to the study of teacher knowledge. If sufficient curriculum supports are present, raising teacher awareness may result in better classroom practices, according to the significant positive connection ( $r = .46, p < .01$ ) between awareness and teaching behaviour.

### 3.2 Capacity Building and Institutional Adoption

Data on course offerings and internship numbers reveal burgeoning institutional engagement with IKS. For example:

Indicator	Quantity
IKS Courses Launched	38
Interdisciplinary Research Projects	88
Curriculum Adopting HEIs	8,000+
Digitized Books	150,000
Faculty Trained	1,000
Planned Faculty Training Expansion	10,000

The emergence of such scale indicates both a policy commitment and the creation of an ecosystem where IKS can contribute to research, pedagogy, and student engagement.

## 4. Discussion: Implications for the Current Generation Holistic Development and Engagement

IKS emphasises value orientation and experiential learning, which aligns with the more general NEP goals of holistic student development, which include emotional, social, and ethical aspects. Qualitative results from secondary school research indicate that students exposed to IKS frameworks reported improved self-awareness, emotional resilience, and ethical reasoning, while educators highlighted increased engagement and motivation, despite the lack of systematic impact data on students.

These metrics support the educational objectives of encouraging critical thinking, creativity, and purpose-driven learning—qualities necessary for future employment and social engagement.

### Preparedness of Teachers as a Crucial Turn

The results of the teacher poll highlight how crucial professional development is. Positive attitudes towards IKS are unlikely to result in quantifiable gains in student learning outcomes without systematic improvements in teacher preparation and instructional resources.

## 5. Challenges and Future Directions

### Resource and Pedagogical Gaps

The absence of curriculum-aligned teaching resources and culturally appropriate pedagogical approaches is a significant obstacle notwithstanding institutional growth. Instructors stated that their capacity to successfully apply IKS was hampered by the lack of exemplars and classroom methods.

### Assessing the Effect on Learning Outcomes

There is currently a dearth of reliable quantitative data connecting IKS integration to long-term results or student performance. In order to evaluate cognitive, emotional, and ethical development, future research should employ controlled experiments that compare cohorts exposed to IKS frameworks with those in conventional curricula.

## 6. Conclusion

By expanding education beyond strictly technical proficiency to holistic, contextual, and value-infused learning, the Indian Knowledge System has great potential to influence the future of the present generation. Although there has been a lot of progress, data on teacher attitudes, institutional adoption, and national integration initiatives indicate that in order to fully realise IKS's promise in more equitable and quantifiable ways, systematic curriculum development, teacher training, and impact-oriented research are required.

## References

- Joshi, D. & Bansal, T. (2023). *Integration of Indian Knowledge Systems into STEM Education: Awareness, Attitudes, and Practices – Survey Findings*.
- Government of India, Ministry of Education. *Implementation of NEP: IKS Initiatives – Institutional Adoption and Capacity Building Data*.

3. Sarita & Singh, D. (2025). *Integrating Indian Knowledge Systems in Contemporary Education: NEP 2020 Analysis*.
4. Jacob, R. & Gaur, R. (2025). *Impact of IKS on Secondary Education Holistic Development*.
5. Mehta, T., & Singh, N. V. (2025). *An Exploration of the Indian Knowledge System: Roots, Significance, and Contemporary Relevance*. Bhartiya Knowledge Systems.
6. "Bridging Tradition and Innovation: The Role of Indian Knowledge Systems in Reimagining Education Today for Gen Z Learners." *International Journal of Research and Innovation in Social Science* (2025).
7. Shrimalibhoi, N. R., & Patel, S. (2025). *Integrating Indian Knowledge System (IKS) in Education: Roles of Teachers, Schools, and Governments*. International Journal of Scientific Research in Humanities and Social Sciences.
8. Haloi, M., & Kharbiryumbai, B. B. (2025). *Integrating the Indian Knowledge System into Teacher Education under NEP 2020*. International Journal of Science and Social Science Research.
9. Jain, B. (2025). *The Need for the Indian Knowledge System in the Contemporary Education System for Sustainable Life: A Systematic Review*. International Journal of Innovation in Engineering Research & Management.
10. Desai, R. (2025). *Integrating Indian Knowledge Systems in Modern Education: Towards an Inclusive and Sustainable Curriculum*. International Journal of Innovation in Engineering Research & Management.