



Academic Corroboration for the Indian Knowledge System: Challenges with its Ultemior Pathway

Arghamitra Bhunia*¹ & Suman Atta*²

1. PG 3rd Semester Student, Department of Education, Midnapore College (Autonomous), West Bengal, India, Email: arghamitrabhunia@gmail.com

2. Corresponding Author: Assistant Professor (Cont.), Department of Education, Midnapore College (Autonomous), West Bengal, India, Email: suman.atta@midnaporecollege.ac.in

*These authors contributed equally to the study.

Abstract:

The Indian Knowledge System (IKS) embodies India's indigenous intellectual heritage across philosophy, sciences, arts, pedagogy, ecology, and socio-cultural practices. In recent years, efforts to integrate IKS into mainstream academia have gained significant momentum, especially under the educational reforms envisioned by the National Education Policy 2020. However, this integration faces multiple academic challenges that hinder its systematic implementation. This study aims to identify and analyse the academic challenges associated with implementing IKS, including epistemological gaps, lack of standardised curriculum frameworks, limited research infrastructure, scarcity of trained faculty, and inadequate institutional support. It also seeks to explore the academic pathways necessary for the effective mainstreaming of IKS in higher education. The research highlights potential strategies such as curriculum redesign, teacher capacity-building, interdisciplinary research promotion, digital archiving of indigenous knowledge, and policy-driven institutional collaborations. The findings suggest that overcoming these challenges requires a balanced combination of academic rigor, cultural sensitivity, and structural reform to ensure that IKS becomes an integral and credible component of contemporary education.

Keywords: Indian Knowledge System, Academic Challenges, Academic Pathway, Curriculum Integration, NEP 2020.

Introduction:

The Indian Knowledge System represents the vast repository of India's long-standing intellectual heritage, encompassing a wide range of indigenous, ancient, and experiential knowledge. The deep influence of IKS can be observed in various fields such as philosophy, education, medical science, mathematics, environmental studies, literature, fine arts, and spiritual practices. The National Education Policy 2020 places special emphasis on the revitalization and rediscovery of the Indian Knowledge System within India's education system. Through this policy, a strong effort has been made in recent years to incorporate the Vedas, the Upanishads, other Indian philosophical texts, ancient Indian scientific knowledge, the thoughts of

sages and seers, and traditional teaching–learning methods into the contemporary Indian education system. When the contents of these sacred texts and the integrated wisdom of ancient knowledge become part of the learning process, they contribute significantly to the development of students’ intellectual and spiritual creativity, critical thinking, problem-solving abilities, and their capacity to address complex mental challenges.

When the Indian Knowledge System is integrated with the contemporary formal education system, it not only helps promote India’s indigenous arts, tribal practices, work-based knowledge, handicrafts, and food processing traditions, but also supports various forms of textual and traditional knowledge that can contribute to making students self-reliant. However, at present, the incorporation of IKS within the Indian academic framework has emerged as a significant challenge. Various factors such as the lack of appropriate educational resources, necessary teaching–learning materials, suitably skilled teachers, and well-developed curricula have become major obstacles to the introduction and effective implementation of IKS in academia.

This article highlights the problems associated with integrating the Indian Knowledge System into the existing education system and outlines academic support strategies that can help connect IKS with contemporary Indian education. Such efforts are essential for preserving India’s ancient knowledge and indigenous practices and for transmitting them meaningfully to future generations.

Review of Related Literature:

Khan & Husain (2025) conducted a study on integrating IKS into education through NEP 2020. The aim of the study is to identify challenges and explore opportunities, and what are the strategies that should be taken for integrating IKS in education through NEP 2020. The paper applies qualitative methodology, which involved textual and content analysis of documents, reports, and policies. After detailed analysis, they conclude that NEP 2020 provides strong policy support, but actual implementation faces challenges, such as limited teacher training, a lack of curriculum models, and other required resource materials.

Yadav & Patil (2025) conducted a study on “Role of Curriculum in Integrating IKS through NEP 2020: Challenges and Solutions.” The aim of the study is to analyse how the curriculum can be reformed to meaningfully integrate IKS. The paper applies a qualitative methodology which involved textual and content analysis of documents and reports. They identify and discuss the challenges to implementing IKS integration through the curriculum under NEP 2020.

Research Objectives:

O₁: To find the academic challenges for implementing IKS.

O₂: To explore an academic pathway for implementing IKS.

Methodology:

This research is primarily qualitative and analytical/descriptive in nature. The objectives of the study have been fulfilled through the analysis of existing policies, research papers, reports, and curriculum frameworks related to the Indian Knowledge System.

Discussion:

Objectives 1: Academic Challenges in Implementing IKS

1.1 Lack of Standardised Academic Frameworks:

The Indian Knowledge System (IKS) is currently facing a lack of a well-organized and coherent curricular framework. According to a report published by the Ministry of Education in 2023, only about 30 per cent of

educational institutions have begun to incorporate IKS into their curricula; however, in most cases, this integration has been implemented through inconsistent and fragmented syllabi (Bhattacharya, S., 2014). Such inconsistency in curricular design hinders the effective presentation of IKS-based learning content in alignment with students' developmental stages and abilities, thereby disrupting the teaching–learning process. Furthermore, the tendency of different academic stakeholders to interpret IKS in varied ways, the fragmented presentation of its content, and the absence of an appropriate and advanced curriculum collectively point to a deficiency in a standardized and institutionalized academic framework.

1.2 Epistemological Gaps Between Traditional and Modern Knowledge:

Traditional knowledge is generally holistic, experiential, context-specific, and rooted in oral traditions. In contrast, modern scientific knowledge is analytical, rational, experimental, and claims universal applicability. Traditional knowledge often offers an integrated worldview that unifies nature, culture, and spirituality, whereas modern knowledge primarily focuses on measurable variables and discrete components. Due to these fundamental differences, recognizing, evaluating, and integrating the Indian Knowledge System (IKS) within existing academic standards has become a complex and challenging process (Khan, M., & Husain, S., 2025)

1.3 Lack of Teachers preparation and Training:

At present, most teachers do not have any formal training in the content and appropriate pedagogical approaches of the Indian Knowledge System (IKS). The majority of teachers have been trained and have practiced teaching methods rooted in modern pedagogy. As a result, the lack of training in IKS-related pedagogy and teaching methodologies has led to a deficiency in their professional competence, creating a significant gap in effective curriculum implementation. The absence of proper pedagogical training has also resulted in incomplete subject knowledge among teachers, which has emerged as a major barrier to effective teaching and learning in academic settings. Only 25 percent of teachers have received formal training in IKS, thereby hindering effective instructional delivery (Kumar & Rao, 2023).

1.4 Shortage of Authentic Research and Academic Resources:

The availability of digital repositories, archival sources, peer-reviewed literature, and authenticated academic documentation related to the Indian Knowledge System (IKS) remains extremely limited. Approximately seven percent of researchers and teachers have acknowledged that standard reference books, peer-reviewed journals, and scholarly articles on IKS are not easily accessible (Mehta, 2024). Moreover, the presence of IKS-related research in international scholarly databases such as Scopus and Web of Science is comparatively low, resulting in weak global academic recognition. The lack of translated texts, archival resources, and critically edited academic editions has constrained the expansion of research in this field and has subsequently affected curriculum design and development.

1.5 Institutional and Policy-Level Barriers:

Although there are policy-level initiatives to incorporate the Indian Knowledge System (IKS), many educational institutions lag behind in effective decision-making during the implementation phase. In several cases, IKS is perceived at the administrative level as an additional responsibility, resulting in its inclusion as a separate or optional component rather than being integrated into the core curriculum. Limited budget allocations, the absence of clear implementation guidelines, and a lack of long-term planning have further complicated the issue. Additionally, ineffective communication between policymakers and educational institutions has created a gap between the intended objectives and actual implementation. Consequently, IKS remains at the periphery rather than becoming a central component of the education system.

1.6 Lacks of proper teaching learning materials:

The shortage of appropriate educational materials is also a major problem. Most Vedic, Ayurvedic, Yoga and other traditional content has still not been translated into English or the languages of modern education. There is a lack of educational materials and dance costumes in various languages within academic institutions for India's diverse traditional knowledge and dances, such as Bharatanatyam, Mohiniyattam, Kuchipudi, Odissi, Manipuri, Sattriya, Kathakali, and Chhau. In the academic sphere of many of India's esteemed literature institutions, it is still not possible for such resources to be available in all languages, which, due to the shortage of adequate educational materials, creates a sense of knowledge deficiency related to the Indian Knowledge System (IKS) among students. Platforms like Swam Diksha and Bharatvidya provide IKS (Indian Knowledge System) content, but both quantitatively and in terms of human resources, they are limited. University and college libraries often do not have adequate IKS-related books in widely accessible languages, creating difficulties for students in gathering information and acquiring knowledge. Ancient texts are in Sanskrit, Old Tamil, and other regional languages, which makes it hard for students to use them as learning resources. Moreover, much IKS knowledge is still transmitted orally or preserved only within communities, and not always documented in written form, which further complicates the dissemination of knowledge.

1.7 Lack of students' interest:

A major portion of contemporary education is focused on technology and the development of modern careers. Students often tend to give greater attention to subjects that are perceived to be directly related to future employment or professional life. As a result, concepts such as the Indian Knowledge System (IKS) or traditional knowledge may appear unfamiliar or irrelevant to students. Consequently, they may believe that such subjects do not offer any tangible benefits for their future careers. This perception ultimately leads to a lack of interest among students toward such curricula.

Objectives 2: Academic Pathways for Integrating IKS

2.1 Redesign with Structured Modules:

Academically sound educational outcomes largely depend on well-organized curriculum modules. Therefore, by reconstructing advanced and engaging curriculum modules, the Indian Knowledge System can become more academically enriched and open to multidisciplinary approaches. The integration of Indian Knowledge System (IKS)-based subjects with modern curricula will strengthen curricular coherence and make education more robust and relevant.

For example, unifying Vedic Mathematics with modern mathematical knowledge can enhance learning and improve students' problem-solving abilities. Similarly, incorporating the principles of Ayurveda as complementary components within health science and biology curricula can deepen understanding of holistic and preventive healthcare. Introducing optional degree or certification programs that combine modern physiotherapy with yoga therapy can open new academic and professional avenues in the field of health and wellness.

Furthermore, in vocational and professional education, along with modern curricula, Indian handicrafts, fine arts, silk industry, and other traditional livelihood-oriented disciplines can be integrated with contemporary art and industry-oriented curricula and offered as optional courses. Such inclusion would not only promote multidisciplinary learning but also contribute to the preservation, modernization, and sustainability of India's traditional knowledge systems

2.2 Strengthening Teacher Education and Professional Development:

To effectively integrate the Indian Knowledge System (IKS) into the education system, it is extremely important to equip teachers with adequate knowledge and skills related to IKS. To enhance teachers' competencies, the introduction of specialized programs, regular workshops, and accredited certificate courses will be helpful in strengthening their professional capacity. Such initiatives will support teachers in understanding the philosophical foundations and historical contexts of IKS, applying appropriate teaching methodologies, developing advanced curricula, redesigning departmental workshops, and improving overall teacher training.

A structured framework for IKS-related training and orientation for faculty members has been provided so that teachers can become more proficient in incorporating IKS concepts, teaching strategies, and other necessary components into the curriculum (Ministry of Education, 2023). If these measures are effectively implemented across educational institutions, the integration of IKS into mainstream education will become more feasible and systematic.

According to NEP 2020, the University Grants Commission (UGC) has initiated special training programs for teachers in various universities and colleges and plans to provide IKS training to a larger number of educators in the future (NEP 2020). Strengthening teacher education, teaching practices, and professional development will make the long-term and sustainable integration of IKS into the education system achievable.

2.3 Establishing Digital Repositories and Knowledge Archives:

The preservation of Indian Knowledge Systems (IKS) can be effectively supported through the development of various digital repositories and open-access research archives, which will help conserve traditional and indigenous knowledge. Verified digital platforms can be utilized for this purpose, and the use of diverse digital technologies can assist in the creation, preservation, and dissemination of IKS-related knowledge in academic contexts. Such digital transformation makes IKS more engaging and easily accessible to students.

Various government initiatives and e-learning platforms such as SWAYAM, DIKSHA, and BharatVidya should be actively used to promote knowledge dissemination. To present IKS-related knowledge and information to students in audio-visual formats, the use of digital equipment needs to be expanded (Pathak, R. P., 2012). Moreover, through collaborative efforts involving academicians, technologists, and traditional knowledge experts, it is possible to develop reliable and high-quality digital learning resources that present IKS more effectively to learners. The creation and widespread adoption of such digital educational materials are highly essential in the academic domain.

2.4 Strengthening Policy Implementation and Institutional Collaboration:

To effectively integrate Indian Knowledge Systems (IKS) into higher education and research, it is essential to formulate well-organized policies and ensure their proper implementation. Merely announcing policies is not sufficient to achieve this objective; adequate institutional support must accompany policy initiatives. When close coordination is established among universities, colleges, research institutions, and local knowledge-bearing communities, education, research, and information related to IKS become stronger and more effective.

Through well-planned policies and sufficient government funding, research activities related to IKS in universities can be significantly accelerated. Furthermore, collaboration among nearby institutions can facilitate the development of joint research projects, educational materials, and the organization of seminars

and workshops. Such continuous activities promote the dissemination and exchange of knowledge and help generate new sources of understanding related to IKS.

Therefore, this kind of organizational and academic collaboration can serve as an effective effort to implement IKS in the education system by making optimal use of financial resources, time, and scholarly expertise.

Conclusion:

The study concludes that the Indian Knowledge System holds significant potential to enrich contemporary education by reconnecting learners with India's intellectual heritage and promoting holistic, culturally grounded learning. However, its effective implementation requires overcoming multiple academic challenges. The lack of standardised curricula, epistemological differences between knowledge traditions, inadequate teacher preparation, insufficient academic resources, and institutional constraints remain key barriers.

To address these limitations, the integration of IKS must follow a well-defined academic pathway that includes curriculum restructuring, systematic teacher capacity-building, interdisciplinary research initiatives, and robust digital archiving of indigenous knowledge. Stronger policy execution and institutional collaboration are also crucial to ensure the long-term sustainability and academic legitimacy of IKS.

Reference:

- Bhattacharya, S. (2014). *Education and the shaping of Indian society*. Orient BlackSwan.
- Datta, D. M. (2018). *The six ways of knowing: A critical study of Indian philosophy*. Motilal Banarsidass.
- Khan, M., & Husain, S. (2025). Integrating Indian Knowledge Systems in education through NEP 2020: Challenges and opportunities. *Journal of Indian Education*, 51(2), 45–60.
- Kumar, R., & Rao, P. (2023). Teacher preparedness for Indian Knowledge Systems: Issues and prospects. *Teacher Education and Development*, 9(3), 67–81.
- Mehta, S. (2024). Research gaps in Indian Knowledge Systems: An academic review. *Indian Journal of Higher Education Research*, 6(2), 91–105.
- Menon, S., & Varma, S. (2021). Digital archiving of indigenous knowledge: Challenges and strategies. *Journal of Knowledge Management*, 15(4), 112–128.
- Ministry of Education. (2020). *National Education Policy 2020*. Government of India.
- Ministry of Education. (2023). *Guidelines for integrating Indian Knowledge Systems in higher education*. Government of India.
- Nambissan, G. B., & Rao, S. (2019). *Sociology of education in India: Changing contours and emerging concerns*. Oxford University Press.
- Pathak, R. P. (2012). *Curriculum planning and development*. Pearson Education.

- Sen, A. (2005). *The argumentative Indian: Writings on Indian history, culture and identity*. Penguin Books.
- Sharma, R. N., & Sharma, R. K. (2019). *Philosophy of education in India*. Atlantic Publishers.
- Subramaniam, B. (2020). Decolonizing knowledge systems in higher education. *Economic and Political Weekly*, 55(32), 41–47.
- Tilak, J. B. G. (2018). Higher education policy reforms in India. *Journal of Educational Planning and Administration*, 32(1), 1–18.
- UNESCO. (2017). *Indigenous knowledge and education: A global perspective*. UNESCO Publishing.
- University Grants Commission. (2022). *Promotion of Indian Knowledge Systems in higher education institutions*. UGC.
- Yadav, R., & Patil, S. (2025). Role of curriculum in integrating Indian Knowledge Systems through NEP 2020: Challenges and solutions. *International Journal of Curriculum Studies*, 12(1), 23–38.

Citation: Bhunia. A. & Atta. S., (2026) “Academic Corroboration for the Indian Knowledge System: Challenges with its Ulterior Pathway”, *Bharati International Journal of Multidisciplinary Research & Development (BIJMRD)*, Vol-4, Issue-03(2), March-2026.