Bridging the Past With the Future: The Role of Indian Knowledge Systems in Indian Education

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Education in contemporary India faces the challenge of reconciling global knowledge demands with the country's rich and diverse intellectual heritage. This article examines the role of Indian Knowledge Systems (IKS) in Indian education, arguing that their critical and thoughtful integration can bridge India's civilizational past with its future educational aspirations. Moving beyond revivalist or nostalgic interpretations, the paper conceptualizes IKS as a plural, evolving, and interdisciplinary body of knowledge encompassing philosophy, science, ethics, ecology, and governance. It situates this discussion within the context of recent policy developments, particularly the National Education Policy (NEP) 2020, which marks a significant shift toward recognizing indigenous knowledge traditions within mainstream curricula. The article analyses traditional educational practices embedded in IKS, highlighting pedagogical principles such as experiential learning, dialogic instruction, ethical orientation, and community engagement, while also acknowledging historical limitations related to access, gender, and caste. Drawing on comparative global experiences of indigenous knowledge integration in Japan, Finland, and New Zealand, the paper situates India within a broader international context of culturally grounded education. The core argument advances the relevance of IKS for civic and ethical education, sustainability, scientific temper, and holistic skill development in the 21st century. At the same time, the study critically engages with challenges related to politicization, cultural homogenization, pedagogical capacity, and inclusivity. It highlights that IKS can meaningfully enrich Indian education only through rigorous scholarship, critical pedagogy, and plural, democratic engagement, positioning tradition not as a return to the past but as a resource for reflective and future-ready citizenship.

Keywords: IKS, education policy in India, NEP 2020, indigenous knowledge, curriculum reform

Introduction

Education in the 21st century faces the dual challenge of preparing learners for participation in an increasingly interconnected global society while maintaining meaningful engagement with local cultures and intellectual traditions. In India, this challenge is intensified by the country's deep civilizational legacy, which encompasses a wide spectrum of philosophical, scientific, and ethical thought developed over millennia. Indian Knowledge Systems (IKS) are a rich and pluralistic repository of indigenous knowledge that spans disciplines such as philosophy, mathematics, medicine, ecology, language, and governance (Mehta & Singh, 2024). Notwithstanding this intellectual wealth, mainstream education in India has long been criticized for its heavy reliance on Western epistemological frameworks and its relative neglect of indigenous intellectual heritage

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(Sharma, Awasthi, & Soni, 2025). This has resulted in curricula that are often perceived as disconnected from India's cultural ethos and incapable of fostering holistic learning.

The publication of the National Education Policy (NEP) 2020 represents a paradigmatic shift in Indian education policy. For the first time, the integration of Indian Knowledge Systems into mainstream curricula is articulated as a key objective, with the intent of creating an educational structure that is both globally relevant and locally rooted (Sarita & Singh, 2025). According to NEP 2020, inclusion of IKS such as yoga, Ayurveda, indigenous ecological practices, and classical languages can enrich students' educational experiences by emphasizing values, sustainability, and experiential learning while also honoring India's intellectual traditions (Priyadharshini & Shruthi, 2025; Mamgain, 2025).

Integrating IKS is not merely an exercise in cultural preservation; it is an attempt to create an education system that emphasizes holistic development, interdisciplinarity, and ethical citizenship (Jacob & Gaur, 2025). As scholars argue, IKS offers alternative epistemological frameworks that can balance abstract reasoning with lived experience, thereby fostering learners who are reflective, critical, and socially responsible (Ramanbhai & Patel, 2025). The Indian Knowledge System's emphasis on interconnectedness and practical wisdom aligns closely with contemporary global calls for sustainability and ethical engagement in education (Kaur & Singh Lehri, 2025). In this context, IKS becomes a compelling resource for addressing the ethical and civic deficits observed in many modern curricula.

However, integrating IKS into formal education is not without challenges. Critics point to issues related to implementation, teacher preparedness, and the risk of superficial or tokenistic inclusion if the integration is not grounded in sound pedagogy and academic rigor (Sharma et al., 2025). There are also concerns that without critical engagement, integration may inadvertently perpetuate unexamined traditions rather than foster reflective understanding. This underscores the need for a contextualized approach that respects the historical depth of IKS while situating it within contemporary educational aims.

This article argues that Indian Knowledge Systems, when thoughtfully and critically integrated into school curricula, can bridge the gap between India's civilizational past and its future aspirations. The paper seeks to conceptualize IKS as a plural and evolving knowledge tradition, examine how NEP 2020 envisions the role of IKS in education, analyze how IKS can contribute to holistic learning, ethical citizenship, and sustainability education, and identify challenges and strategies for meaningful implementation. The article contributes to ongoing academic and policy debates concerning the decolonization of curricula, cultural continuity, and the development of educational systems that are simultaneously rooted and future-oriented.

Understanding Indian Knowledge Systems

Indian Knowledge Systems (IKS) encompass a broad and pluralistic set of intellectual traditions that have evolved on the Indian subcontinent over millennia. Rather than representing a single, monolithic system, IKS constitute a diverse constellation of ideas, practices, and epistemologies rooted in multiple philosophical, cultural, and regional contexts (Mehta & Singh, 2024). At its core, IKS refers to knowledge that is socially situated, historically grounded, and generated through sustained inquiry into human, natural, and cosmic phenomena. Crucially, IKS differs from reductive notions of "traditional knowledge" insofar as it comprises systematic frameworks of reasoning, pedagogy, and ethical reflection that have enduring relevance for contemporary education. The plurality of IKS is evident in its historical sources and intellectual lineages. Classical traditions such as Vedic, Buddhist, and Jain thought have produced rich bodies of philosophical and epistemological

literature. Vedic knowledge, preserved through oral traditions, emphasizes the interrelation of ritual, cosmology, and ethics (Reddy & Nanda, 2019). Buddhist epistemology, especially in the works of Dignāga and Dharmakīrti, foregrounds rigorous logical analysis and theories of perception and inference (Tillemans, 1999). Jain philosophy contributes sophisticated accounts of non-violence (*ahimsa*), non-absolutism (*anekāntavāda*), and ethical conduct, which have implications for both personal and social domains (Dundas, 2002). Alongside these classical traditions, regional, folk, and indigenous knowledge systems contribute locally grounded practices and interpretations that are embedded in lived cultural contexts. These include tribal ecological practices, folk medicine, and region-specific arts and crafts, which reflect deep engagements with environmental and social realities (Gadgil, Berkes, & Folke, 1993).

The breadth of IKS is reflected in its disciplinary domains. In philosophy and ethics, concepts such as *Dharma* (duty and moral order), *Karma* (action and consequence), and *Nyaya* (logic and reasoning) have guided both individual conduct and collective social frameworks (Rao, 2019). These concepts are not merely abstract metaphysical claims but function as normative frameworks that inform social responsibility and ethical action. In science and mathematics, ancient Indian contributions are well documented; Aryabhata's astronomical computations and Baudhayana's Sulbasutras, which contain geometric insights that predate similar discoveries elsewhere, attest to systematic scientific inquiry in the subcontinent (Joseph, 2011). Similarly, traditional medical systems like Ayurveda demonstrate an integrated understanding of human physiology, disease, and therapeutic intervention that combines empirical observation with holistic approaches to health (Zysk, 2016).

Governance and political thought in IKS also display considerable sophistication. Treatises such as *Arthashastra* articulate theories of statecraft, administration, and economic policy that emphasize realpolitik tempered by ethical considerations (*Rajadharma*) (Rangarajan, 1992). This intersection of governance and morality suggests that political authority, for classical Indian thinkers, was to be exercised in relation to duties toward the populace rather than abstract conceptions of power. Ecology and sustainability are integral to many IKS traditions. Indigenous and tribal ecological knowledge systems capture nuanced understandings of seasonal cycles, land use, water conservation, and biodiversity management. Such knowledge has been shown to contribute to sustainable environmental practices that contemporary science increasingly recognizes as valuable for climate resilience (Berkes, 2012). The pedagogical dimensions of IKS further reinforce this ecological sensibility, as traditional education was intimately connected to place, community, and the natural world. Underlying these diverse domains is core epistemological features that distinguish IKS from Western knowledge systems. First, IKS tend to adopt a holistic worldview, wherein knowledge is not compartmentalized into rigid disciplinary silos but is integrative, connecting individual, social, and cosmic dimensions of experience (Kumar, 2018). This contrasts with the highly specialized and often reductionist tendencies of modern Western curricula. Second, interdisciplinarity is a hallmark of IKS: philosophical inquiry, ethical reflection, scientific observation, and practical knowledge cohere in dynamic ways that resist narrow categorization (Nayak & Chatterjee, 2022). Third, knowledge in IKS traditions is inherently tied to ethical and social responsibility. The pursuit of knowledge is understood not as an abstract intellectual exercise but as a means to foster moral behavior, social harmony, and ecological balance (Saraswati, 2020).

It is important to distinguish IKS from simplistic revivalist narratives that seek merely to reassert cultural heritage without critical engagement. Revivalism often romanticizes the past and overlooks historical complexity, internal diversity, and the need for rigorous academic scrutiny. In contrast, IKS as conceptualized in contemporary scholarship emphasize critical appropriation engaging traditional knowledge in dialogue with

modern disciplines, testing it where appropriate, and integrating it into curricula in ways that enhance educational quality and relevance (Pandey & Dasgupta, 2021). This approach avoids the polarities of uncritical nostalgia and wholesale rejection, positioning IKS as a living intellectual resource capable of informing education that is culturally grounded and globally informed.

Indian Knowledge Systems and Traditional Educational Practices

Indian Knowledge Systems have historically been transmitted through educational practices that were deeply embedded in social, ethical, and cultural contexts. Prior to the institutionalization of colonial education, learning in the Indian subcontinent largely took place within decentralized and community-based settings such as *gurukuls*, *ashrams*, monastic institutions, madrasas, and indigenous learning spaces associated with craft guilds and local communities (Altekar, 1934; Mukherjee, 2014). These institutions functioned not merely as sites of instruction but as environments for moral formation, socialization, and civic responsibility. The *Gurukul* system remains one of the most frequently cited models of traditional Indian education. In this system, students resided with their teacher (*guru*) and participated in a shared life of learning, discipline, and service. Education was experiential and integrated daily activities with intellectual inquiry, reinforcing the unity of knowledge and life (Sharma, 2005). Subjects such as philosophy, grammar, mathematics, astronomy, ethics, and statecraft were taught alongside practical skills, ensuring that learning was both reflective and socially relevant.

The "Guru-Shishya Parampara" is a pedagogical relationship based on trust, dialogue, and mentorship. Unlike modern transactional models of education, this relationship emphasized long-term moral and intellectual guidance. The *guru* was not merely an instructor but a moral exemplar responsible for shaping the student's character and sense of duty toward society (Radhakrishnan, 1951). Knowledge transmission relied heavily on oral instruction, memorization, debate, and questioning, fostering intellectual discipline and interpretive skill.

Traditional pedagogical practices within IKS were marked by three distinctive features. First, experiential learning was foundational. Students learned through observation, participation, and practice, whether in philosophical discourse, ritual performance, or craft production (Kumar, 2018). Second, dialogic instruction was central to learning. Texts such as the *Upanishads* and Buddhist discourses are structured as dialogues, reflecting an educational culture that valued questioning, debate, and reasoned argument (Rao, 2019). This dialogic method cultivated critical thinking rather than passive absorption of knowledge. Third, community engagement formed an integral part of education. Learning was closely linked to social life, with students expected to contribute to household, agricultural, and communal responsibilities, reinforcing the idea that knowledge carried social obligations (Mukherjee, 2014). Importantly, education within IKS traditions was oriented toward character formation and citizenship, not merely intellectual attainment. Concepts such as *Dharma* (ethical duty), *Seva* (service), and *Lokasangraha* (social welfare) framed education as a moral endeavor aimed at producing socially responsible individuals (Sen, 2005). Political and civic education, particularly through texts like the *Arthashastra* and epics, emphasized governance as a moral responsibility rather than an exercise of power alone (Rangarajan, 1992). It is essential to critically acknowledge the limitations of traditional educational systems. Access to formal learning was often restricted by caste, gender, and social status, excluding large sections of society from institutional education (Chakrabarti, 2018). Women's access to formal learning was uneven and historically constrained, despite notable exceptions. These exclusions underline the need for caution against romanticizing pre-modern educational systems and highlight the importance of equity and inclusion in contemporary adaptations.

Therefore, the relevance of traditional educational practices rooted in IKS lies not in their replication but in

their conceptual and pedagogical insights. Modern education can draw from these traditions by adopting experiential learning, dialogic pedagogy, ethical orientation, and community engagement while simultaneously rejecting historical inequalities and aligning with democratic values (Kumar & Nair, 2021). Such selective and critical engagement allows IKS to inform contemporary education in ways that are inclusive, reflective, and future-oriented.

Indian Knowledge Systems in Contemporary Education Policy

The renewed emphasis on Indian Knowledge Systems (IKS) within India's contemporary education policy reflects a broader attempt to rethink the epistemic foundations of learning in a postcolonial context. After decades of policy frameworks shaped primarily by colonial legacies and globalized knowledge hierarchies, recent reforms signal a deliberate shift toward recognizing indigenous intellectual traditions as legitimate sources of knowledge. This policy turn is most clearly articulated in the National Education Policy (NEP) 2020, which positions IKS as integral to India's educational future rather than as a peripheral cultural supplement (Government of India [GoI], 2020).

NEP 2020 and the Policy Vision of IKS

NEP 2020 explicitly acknowledges the value of ancient and indigenous knowledge traditions in shaping holistic education. The policy emphasizes that education must be rooted in India's "ethos, culture, and traditions" while remaining globally engaged (GoI, 2020, p. 4). IKS is presented not as a nostalgic return to the past but as a resource for cultivating ethical reasoning, environmental consciousness, and interdisciplinary thinking. By referencing fields such as philosophy, mathematics, medicine, linguistics, architecture, and governance, the policy broadens the scope of IKS beyond religious or spiritual knowledge. Importantly, NEP 2020 links IKS with the idea of holistic and multidisciplinary education, arguing that indigenous traditions historically resisted rigid disciplinary boundaries (Kumar, 2021). This framing aligns IKS with contemporary educational debates on integration, critical thinking, and value-based learning, rather than positioning it in opposition to modern scientific knowledge.

Curriculum Reforms and NCERT Initiatives

Following NEP 2020, the National Council of Educational Research and Training (NCERT) has initiated curriculum reforms aimed at incorporating elements of IKS into school education. These reforms include the integration of Indian philosophy, ethical reasoning, yoga, and traditional ecological knowledge into textbooks and pedagogical materials (NCERT, 2023). The emphasis on yoga and mindfulness is justified not only as cultural heritage but also as contributing to students' physical and mental well-being, aligning with global concerns about student health and stress. NCERT has also sought to incorporate local history and indigenous knowledge systems, particularly through region-specific examples and case studies. This approach challenges the earlier dominance of centralized and homogenized narratives, allowing students to engage with their immediate cultural and ecological contexts (Batra, 2022). Such curricular changes represent a shift from abstract universalism toward contextualized learning, a principle long embedded within indigenous educational traditions.

Multilingual Education and Epistemic Access

A significant dimension of IKS integration in contemporary policy is the emphasis on multilingual education. NEP 2020 advocates mother-tongue or regional-language instruction, particularly in early education, arguing that language is central to cognitive development and cultural continuity (GoI, 2020). Scholars have noted that this

linguistic shift also has epistemic implications, as many indigenous concepts, practices, and worldviews are embedded in vernacular languages and are often inadequately translated into English (Mohanty, 2019). By legitimizing Indian languages as mediums of instruction, policy reforms seek to democratize access to knowledge and challenge the colonial privileging of English. This move aligns with broader decolonial critiques that view language as a site of power and epistemic exclusion (Nandy, 2015).

IKS and the Decolonization of Education

The institutionalization of IKS within education policy can be understood as part of a wider project of decolonizing education. Decolonization here does not imply rejection of Western knowledge but rather a rebalancing of epistemic authority (Bhambra, 2014). NEP 2020's emphasis on indigenous intellectual traditions reflects an attempt to restore intellectual confidence and challenge the historical marginalization of non-Western knowledge systems within formal education. However, scholars caution that decolonization requires more than symbolic inclusion. Without critical engagement, IKS risks being reduced to cultural tokenism or ideological appropriation (Chakrabarti, 2021). Genuine decolonization demands pedagogical transformation, reflexive scholarship, and institutional autonomy.

Institutional Initiatives and Implementation Challenges

At the institutional level, universities have begun establishing IKS centres and divisions, often supported by the University Grants Commission (UGC) and the Ministry of Education. These centres aim to promote research, curriculum development, and interdisciplinary engagement with traditional knowledge systems (UGC, 2022). Additionally, teacher training modules have been introduced to familiarize educators with IKS concepts and pedagogies. Despite these initiatives, a substantial gap remains between policy intent and classroom practice. Many teachers lack adequate training, pedagogical resources, or conceptual clarity to meaningfully integrate IKS into everyday teaching (Batra, 2022). Moreover, standardized assessment systems continue to prioritize rote learning, limiting the transformative potential of IKS-based pedagogy.

Contemporary education policy marks an important step toward recognizing Indian Knowledge Systems as living and dynamic intellectual traditions. Yet, the success of this policy vision depends on sustained institutional commitment, teacher capacity-building, and critical engagement that avoids both romanticization and exclusion.

Bridging the Past With the Future

The contemporary relevance of Indian Knowledge Systems lies not in their uncritical revival but in their capacity to inform pedagogical frameworks that address ethical, civic, ecological, and intellectual challenges of the 21st century. When engaged critically, IKS offer conceptual resources for nurturing responsible citizenship, sustainability consciousness, scientific temper, and holistic skill formation. This section examines how selected dimensions of IKS can contribute to future-ready education without undermining democratic pluralism or modern scientific rationality.

Civic and Ethical Education

Indian knowledge traditions have historically foregrounded ethics and civic responsibility as inseparable from education. Concepts such as *dharma* (ethical order), *kartavya* (duty), and *lokasangraha* (collective welfare) articulate a vision of citizenship that extends beyond legal compliance to moral accountability (Radhakrishnan, 1951). Unlike procedural notions of citizenship that emphasize rights alone, these concepts stress the cultivation of ethical judgment and social responsibility. The *Bhagavad Gita's* idea of *lokasangraha* situates individual

action within the larger social good, suggesting that education must prepare learners to act with awareness of societal consequences (Gandhi, 1937/2009). This perspective resonates with contemporary civic education debates that argue democratic citizenship requires moral reasoning, empathy, and participatory ethics, not merely constitutional literacy (Biesta, 2011).

Importantly, IKS-based civic education does not prescribe a singular moral code. Classical Indian philosophical traditions Nyaya, Buddhist ethics, and Jain *anekantavada* emphasize debate, plurality, and reasoned disagreement (Matilal, 1986). Integrating these traditions into civic pedagogy can strengthen democratic dispositions by encouraging critical reflection rather than doctrinal conformity. Thus, IKS can enrich civic education by fostering ethical agency rooted in deliberation and social responsibility.

Sustainability and Environmental Education

One of the most significant contributions of IKS to future education lies in the domain of environmental ethics and sustainability. Indigenous Indian worldviews conceptualize nature not as a resource to be exploited but as a living system with which humans share reciprocal responsibilities (Gadgil & Guha, 1995). The *panchabhuta* framework earth, water, fire, air, and space, articulates an ecological understanding of interdependence that aligns closely with contemporary systems thinking in environmental science. Traditional agrarian practices, water conservation systems, and forest management techniques developed by local and tribal communities exemplify applied ecological knowledge embedded in everyday life (Agrawal, 2005). These practices, often dismissed as "pre-modern", are increasingly recognized by scholars as sustainable alternatives to extractive development models. Incorporating such knowledge into environmental education can contextualize sustainability within lived experience rather than abstract policy discourse.

However, integrating indigenous ecological wisdom into formal education requires caution. Scholars warn against romanticizing tribal knowledge without acknowledging historical dispossession and structural inequalities (Baviskar, 2011). A critical pedagogical approach must therefore present IKS as dynamic and context-bound, encouraging students to examine both its strengths and limitations. When framed analytically, IKS can complement scientific environmental education by deepening ethical engagement with ecological crises.

Scientific Temper and Knowledge Innovation

Contrary to popular misconceptions, Indian Knowledge Systems have long traditions of rational inquiry, logic, and empirical observation. Classical texts in mathematics, astronomy, medicine, and logic such as those by Aryabhata, Sushruta, and the Nyaya philosophers demonstrate structured reasoning and methodological rigor (Pingree, 2003). These traditions challenge the false binary between "traditional" and "scientific" knowledge. The Nyaya school's emphasis on *pramana* (means of valid knowledge), debate, and inference provides a philosophical foundation for cultivating scientific temper an objective explicitly endorsed in India's constitutional and educational vision (Chattopadhyaya, 1986). Engaging students with these traditions can help situate scientific reasoning within a culturally familiar epistemic framework, enhancing conceptual accessibility. Integrating IKS with modern science education does not imply substituting contemporary scientific methods. Rather, it encourages epistemic dialogue where students learn how knowledge systems evolve, interact, and sometimes conflict. Such integration can foster innovation by enabling learners to draw from multiple intellectual traditions while adhering to empirical rigor and critical scrutiny (Subramaniam, 2019).

Holistic and Skill-Based Learning

A defining feature of Indian educational philosophy is its holistic understanding of human development, encompassing mind, body, intellect, and emotion. Educational practices historically emphasized balance rather than specialization, viewing learning as integral to well-being and ethical self-cultivation (Aurobindo, 1990). This perspective aligns with contemporary educational concerns regarding mental health, stress, and fragmented learning.

Practices such as yoga and mindfulness, now increasingly supported by empirical research, demonstrate tangible benefits for cognitive focus, emotional regulation, and overall well-being (Brown & Ryan, 2003). When incorporated responsibly into educational settings, these practices can support student resilience and self-awareness without religious indoctrination. Moreover, holistic learning in IKS is not opposed to skill development. Traditional pedagogy emphasized adaptability, problem-solving, communication, and community engagement competencies now classified as 21st-century skills (OECD, 2018). Rooting these skills in cultural contexts can enhance their relevance and ethical grounding, preventing the instrumentalization of education solely for market outcomes.

Indigenous Knowledge in Global Education

Situating Indian Knowledge Systems (IKS) within a broader global context reveals commonalities in how diverse educational systems attempt to integrate indigenous knowledge traditions into formal curricula. Comparative insights from Japan, Finland, and New Zealand illustrate distinct pathways through which cultural, ethical, and experiential learning enters mainstream education, offering instructive lessons for India's own educational reforms.

In Japan, moral and cultural education has long been a recognized component of the school curriculum. Known as *dōtoku* education, this approach prioritizes ethical development, social cohesion, and character formation alongside academic competencies. Drawing on cultural narratives and communal values, Japanese moral education seeks to cultivate responsible citizens capable of critical reflection and social empathy (Lewis, 2009). Such integration of cultural ethos into schooling emphasizes values without subsuming academic learning, suggesting a model where indigenous moral frameworks complement rather than compete with universal competencies.

Finland represents a different model, where contextualized and experiential learning lies at the heart of its internationally acclaimed education system. Finnish curricula prioritize student agency, project-based learning, and interdisciplinary inquiry, allowing learners to engage deeply with real-world problems (Sahlberg, 2015). Although not explicitly framed as "indigenous knowledge", the Finnish approach resonates with principles long embedded in many indigenous systems, including place-based learning and community engagement. This curricular flexibility encourages students to draw from local contexts, reinforcing the view that learning is most meaningful when situated in learners' lived environments.

New Zealand's integration of Māori knowledge into the national curriculum provides a particularly relevant case for India. Under the *Te Marautanga o Aotearoa* and *The New Zealand Curriculum*, Māori concepts such as *manaakitanga* (care and respect) and *kaitiakitanga* (guardianship of the environment) are embedded across subject areas (King, 2003). The bicultural framework explicitly acknowledges the Treaty of Waitangi as a foundational document, positioning Māori worldviews as integral to national identity and education. This model demonstrates how indigenous epistemologies can be legitimized within formal schooling through policy, teacher development, and curriculum design.

These global examples offer three critical lessons for India's efforts to integrate IKS into education. First, inclusivity must be central; curricular reform should honor multiple knowledge traditions and avoid privileging any single narrative (McCarty, 2018). Second, academic rigor is essential to ensure indigenous knowledge is interpreted critically and contextualized within broader disciplinary frameworks, preventing superficial or folkloric inclusion (Ladson-Billings, 2009). Third, contextual adaptation drawing on local cultures, languages, and ecological realities can make learning more meaningful and relevant for students.

India's comparative advantage in this global landscape is significant. With a rich civilizational depth and unparalleled diversity of knowledge traditions spanning languages, philosophies, ecological practices, and arts, it has the potential to develop a pluralistic and dialogic model of indigenous knowledge integration. Such a model would not seek to replicate foreign systems wholesale but would adapt lessons in ways that strengthen democratic inclusion, intellectual plurality, and culturally grounded critical inquiry.

Challenges, Limitations, and Ethical Concerns

While the integration of Indian Knowledge Systems (IKS) into contemporary education offers significant pedagogical and civic possibilities, it also raises a range of challenges and ethical concerns that demand careful scholarly scrutiny. Any serious engagement with IKS must move beyond celebratory narratives and address the risks of politicization, epistemic exclusion, and pedagogical impracticality. This critical engagement is essential to ensure that IKS contributes to democratic and inclusive education rather than reinforcing ideological or social hierarchies.

Politicization and Ideological Misuse

One of the most prominent concerns surrounding IKS is the risk of politicization. Scholars caution that indigenous knowledge traditions can be selectively interpreted or instrumentalized to serve nationalist or ideological agendas, often at the expense of intellectual plurality and critical inquiry (Nussbaum, 2007; Subramaniam, 2019). When IKS are framed as a singular, civilizational essence, it risks collapsing diverse philosophical traditions into a homogenized narrative aligned with dominant political ideologies. Such instrumentalization undermines the academic integrity of IKS and transforms education into a site of ideological socialization rather than critical learning. A scholarly approach must therefore emphasize interpretive plurality, historical context, and debate, recognizing that Indian intellectual traditions themselves were marked by disagreement, contestation, and internal critique (Matilal, 1986).

Cultural Homogenization Versus Plural Traditions

Closely linked to politicization is the danger of cultural homogenization. India's knowledge traditions are not monolithic; they encompass classical Sanskritic texts as well as regional, folk, tribal, and marginalized epistemologies. Overemphasis on elite textual traditions risks reproducing historical hierarchies of caste, gender, and language within education (Rege, 2010). Dalit, Adivasi, and feminist scholars have highlighted how dominant representations of "Indian culture" often silence subaltern knowledge systems and lived experiences (Guru & Sarukkai, 2012). Ethical integration of IKS must therefore adopt a plural and inclusive framework that acknowledges multiple sources of knowledge and avoids privileging any single tradition as normative.

Pedagogical and Institutional Challenges

At the level of classroom practice, significant pedagogical challenges remain. Teacher preparedness is a major concern, as many educators lack formal training in engaging with IKS critically and interdisciplinarily

(Batra, 2022). Without adequate teacher education and scholarly resources, IKS risk being reduced to superficial content additions rather than meaningful pedagogical transformation. Curriculum overload is another limitation. Indian school curricula are already dense, and the addition of new content without structural rethinking can exacerbate rote learning and cognitive burden (Kumar, 2018). This highlights the need for curricular integration rather than expansion embedding IKS concepts within existing subjects through thematic and inquiry-based approaches.

Need for Critical Pedagogy and Scholarly Framing

A central ethical imperative in integrating IKS is the adoption of critical pedagogy. Knowledge must be presented not as timeless truth but as historically situated, socially embedded, and open to critique (Freire, 1970). Critical pedagogy allows students to engage with IKS analytically examining its philosophical contributions while also questioning its exclusions and limitations. Scholarly framing is essential to prevent essentialism. Academic rigor, peer-reviewed research, and interdisciplinary dialogue must guide curriculum design and teacher training. This ensures that IKS remains a living intellectual tradition rather than a static cultural artifact.

Inclusivity and Social Justice

Finally, inclusivity remains a foundational ethical concern. Gender, caste, regional diversity, and linguistic plurality must be central to any IKS-based educational reform. Historical exclusions of women and marginalized communities from formal learning spaces cannot be reproduced under the guise of tradition (Rege, 2010). An inclusive IKS framework must foreground social justice, amplify marginalized voices, and align with constitutional values of equality and democracy. Indian Knowledge Systems in education can only be realized through critical engagement, ethical sensitivity, and institutional accountability. Addressing these challenges is not a constraint on IKS but a necessary condition for its meaningful and democratic integration into future-oriented education.

Conclusion

This study has argued that Indian Knowledge Systems hold significant relevance for contemporary education when approached as a dynamic and critically engaged intellectual tradition rather than as a static inheritance. The central contention of the paper is that IKS can meaningfully contribute to future-ready education by enriching civic learning, ethical reasoning, environmental consciousness, and holistic skill development. Rather than positioning indigenous knowledge in opposition to modern education, the paper has demonstrated how IKS can operate as a bridge linking historical wisdom with present challenges and future aspirations. Indian Knowledge Systems offer conceptual resources that foreground responsibility, relationality, and ethical agency. When integrated thoughtfully, these traditions can deepen democratic citizenship by emphasizing moral reasoning, collective well-being, and social accountability. At the same time, the plural and dialogic nature of Indian intellectual traditions challenges homogenized cultural narratives and reinforces the importance of debate, critical inquiry, and epistemic diversity within education. This pluralism is particularly vital in a democratic society where education must nurture independent judgment rather than ideological conformity.

The paper has also shown that the pedagogical value of IKS lies in its holistic orientation. By integrating mind, body, and intellect, and by situating learning within ecological and social contexts, IKS resonate with contemporary concerns around student well-being, sustainability, and interdisciplinary learning. Such an approach aligns education with broader human and societal goals, moving beyond narrow instrumentalism and

market-driven skill formation. At the same time, the analysis has underscored the necessity of caution. The inclusion of IKS in education must remain grounded in academic rigor, critical pedagogy, and inclusivity. Without these safeguards, there is a risk of politicization, cultural homogenization, and the marginalization of subaltern knowledge traditions. The ethical integration of IKS therefore demands scholarly framing, teacher preparedness, and institutional commitment to plurality and social justice.

The role of Indian Knowledge Systems in education is not to recover an idealized past, but to engage tradition as a living source of reflection and innovation. Education, when informed by critically interpreted indigenous knowledge, can play a transformative role in shaping ethical, democratic, and environmentally conscious citizens. The future of IKS in Indian education thus depends on its capacity to remain open, dialogic, and oriented toward the evolving needs of a diverse and democratic society.

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