

Integration of Indian Knowledge System in Social Science Education

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Abstract:

अयं निजः परो वेति गणना लघुचेतसाम्। (ayam nijah paro veti ganana laghucetasam)

उदारचरितानां तु वसुधैव कुटुम्बकम्॥ (udāracaritānām tu vasudhaiva kuṭumbakam)

The original Verse appears in Chapter 6 of the Maha Upanishad Vi.71-73., and it is considered the most important moral value in the Indian society. This verse of Maha Upanishad is engraved in the entrance hall of the Parliament Of India. The Indian Knowledge System is a vast and diverse repository of wisdom, encompassing a wide range of disciplines that have developed over millennia. Rooted in the unique cultural, philosophical and intellectual traditions of India, IKS offers a holistic approach to understand the world, integrating spiritual, intellectual and practical knowledge. The objectives of studying Indian Knowledge Systems are multifaceted. First, it aims to preserve and promote India's rich and intellectual heritage. Second, it seeks to provide insights into how these traditional systems can inform and enrich contemporary thought and practice. Finally, it endeavours to foster a deeper understanding of the interconnectedness between different branches of knowledge within the Indian context. This paper examines the concept of the IKS and explores its significance, potential and challenges when integrated into social science education and teaching within the framework of the National Education Policy 2020. It analyses historical foundations, epistemological features, pedagogical implications, curricular approaches, classroom practices and policy perspectives.

Keywords: Indian Knowledge System, NEP 2020, Curriculum Integration, Pedagogy, Decolonisation, Indigenous Knowledge, Civic Education, Experiential Learning.

1. Introduction

Indian knowledge system is an ancient and rich collection of beliefs, practices and philosophies that have been passed down from generation to generation in India. The Indian Knowledge System (IKS) refers to the diverse range of knowledge traditions, epistemologies, practices and value-systems that have evolved on the South Asian subcontinent across centuries. It includes philosophical systems (darshanas), historical narratives, textual traditions (Vedas, Puranas, Upanishads, Dharmashastras, Arthashastra, Sangam literature), scientific and technological know-how (Ayurveda, metallurgy, architecture), and everyday wisdom embedded in folk practices and local institutions. It encompasses various fields such as science, spirituality, art, literature and social norms has played a significant role in shaping Indian society and culture. The foundation of the Indian knowledge system lies in the ancient texts of the Vedas, which are considered to be the oldest scriptures in the world. The Vedas contain a vast amount of knowledge on subjects ranging from medicine, astronomy, mathematics and politics to spirituality and philosophy. They provide insights into the Indian way of life, highlighting the importance of balance, harmony and unity in society (education.gov.in, 2023).

The National Education Policy (NEP) 2020 represents a paradigm shift in Indian education by emphasizing holistic, multidisciplinary and experiential learning. It advocates for the inclusion of India's cultural and intellectual heritage in all levels of education (Government of India, 2020). The Indian Knowledge System (IKS)—comprising indigenous philosophical, scientific, social and cultural traditions—offers a vast repository for enriching social science education. Integrating IKS into teaching aligns with NEP's

goals of developing critical thinking, ethical reasoning, and cultural rootedness while fostering global competencies. Social Science, as disciplines concerned with human behavior, institutions, and societies, are ideal vehicles for introducing IKS perspectives. This integration allows students to engage with local histories, governance models, economic systems, and environmental ethics rooted in Indian traditions, thus making education more relevant and inclusive. The objectives of studying Indian Knowledge Systems are multifaceted. First, it aims to preserve and promote India's rich and intellectual heritage. Second, it seeks to provide insights into how these traditional systems can inform and enrich contemporary thought and practice. Finally, it endeavours to foster a deeper understanding of the interconnectedness between different branches of knowledge within the Indian context.

2. Objectives

- 1) To examine the relevance of IKS in the context of NEP 2020 for Social Science teaching.
- 2) To define and situate the Indian Knowledge System in relation to social sciences.
- 3) To investigate pedagogical approaches for integrating IKS into social science curricula.
- 4) To identify challenges and ethical considerations in implementing IKS-informed curricula.

3. Literature Review

Scholarly work on integrating indigenous knowledge into formal education highlights benefits such as improved learner engagement, relevance, and preservation of intangible heritage. Several scholars have emphasized the importance of indigenous and local knowledge systems in

education (Bhattacharya, 2018; Rao, 2019). The concept of decolonizing education through the inclusion of indigenous epistemologies has gained global traction (Chakrabarty, 2000; Smith, 2012). Within the Indian context, Gadgil, Berkes and Folke (1993) demonstrated the value of traditional ecological knowledge for sustainable resource management. Similarly, Nandy (1983) and Prakash (1999) have examined how colonial education marginalized indigenous thought systems. NEP 2020 builds on these perspectives by recommending that education systems rediscover India's traditional knowledge while integrating modern pedagogical practices (NCERT, 2020). Recent studies (Sundar & Menon, 2022; Desai, 2023) suggest that including IKS in curricula enhances student engagement and cultural self-esteem, particularly when taught through experiential and inquiry-based methods.

NEP 2020: Salient Features

India's first education policy of 21st Century aims to reform the country's education system to make it more holistic, flexible and suited to 21st century needs. It improves foundational literacy, increasing higher education enrolment and fostering critical thinking, creativity and problem solving techniques. Salient features of NEP 2020 includes-

- **Foundational and Multilevel Education:** NEP proposes a 5+3+3+4 structure emphasizing early foundational skills—IKS can be introduced progressively across stages with age-appropriate complexity.
- **Experiential, Holistic and Multidisciplinary Learning:** NEP's encouragement of projects, internships, and experiential learning supports IKS through fieldwork, apprenticeships with artisans, and community-based projects.
- **Language and Regional Context:** NEP's emphasis on mother tongue/regional languages up to at least Grade 5 (and beyond when possible) enables access to primary IKS sources and oral traditions.
- **Teacher Capacity Building:** NEP mandates continuous professional development—critical for training teachers to handle IKS responsibly.
- **Assessment Reforms:** NEP calls for competency-based assessments and reduction of rote learning, which aligns with project-based assessment of IKS learning outcomes.
- **School-Community-Local Knowledge Partnerships:** NEP encourages schools to draw from local ecosystems, enabling collaborations with knowledge-bearers and institutions.
- **Recognizing, identifying, and fostering the unique capabilities of each student,** by sensitizing teachers as well as parents to promote each student's holistic development in both academic and non-academic spheres;
- **Flexibility,** so that learners have the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests;
- **No hard separations** between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning;
- Multidisciplinary and a **holistic education** across the sciences, social sciences, arts, humanities, and sports for

a multidisciplinary world in order to ensure the unity and integrity of all knowledge;

- **Emphasis on conceptual understanding** rather than rote learning and learning-for-exams;
- **Creativity and critical thinking** to encourage logical decision-making and innovation;
- **Ethics and human & Constitutional values** like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice;
- **Promoting multilingualism and the power of language** in teaching and learning;
- **Life skills** such as communication, cooperation, teamwork, and resilience;
- **Focus on regular formative assessment for learning** rather than the summative assessment that encourages today's 'coaching culture';
- **Extensive use of technology** in teaching and learning, removing language barriers, increasing access for *Divyang* students, and educational planning and management;
- A **'light but tight' regulatory framework** to ensure **integrity, transparency, and resource efficiency** of the educational system through audit and public disclosure while encouraging innovation and out-of-the-box ideas through **autonomy, good governance, and empowerment**;
- A **rootedness and pride in India**, and its rich, diverse, ancient and modern culture and knowledge systems and traditions;
- **Substantial investment in a strong, vibrant public education system** as well as the encouragement and facilitation of true philanthropic private and community participation.

According to NEP 2020, education should not merely transmit knowledge but should cultivate critical thinking, creativity and ethical reasoning. Integrating IKS into social sciences thus fulfills the dual objectives of epistemic inclusivity and competency-based learning.

Integration of NEP 2020 and IKS

NEP 2020 explicitly calls for the integration of "Indian ethos" across disciplines (Government of India, 2020, p. 45). The policy envisions educational reforms that encourage the study of traditional knowledge, languages, and indigenous art forms. It further recommends the establishment of an Indian Knowledge System Division under the Ministry of Education to coordinate national efforts.

The policy's focus areas relevant to IKS integration include:

- **IKS as Epistemic Resource, Not Replacement:** IKS should complement disciplinary methods—provide additional sources, case studies, and perspectives rather than substituting historical method or social scientific rigour.
- **Multidisciplinary and Holistic Learning:** Encouraging cross-disciplinary projects connecting social sciences with arts and natural sciences.

- **Experiential and Local Learning:** Promoting fieldwork and community engagement to connect classroom content with real-world contexts.
- **Use of Regional Languages:** Facilitating access to IKS through primary sources available in local languages.
- **Teacher Education Reform:** Mandating continuous professional development aligned with indigenous pedagogical perspectives.
- **Progressive Complexity across Grades:** Introduce simple local knowledge (e.g., culture, prayers, rituals, festivals, pilgrimage, livelihoods) in middle school; advanced analysis (historiography, source-critique, local democratic system); moral values in secondary levels.
- **Interdisciplinary Threads:** IKS content should be threaded across history, civics, geography, economics, and environmental studies to reflect its integrated nature.
- **Inquiry and Source-Criticism:** Teach methods to interrogate oral histories, inscriptions, and texts for bias, context and change over time.
- **Experiential Learning & Fieldwork:** Regular field visits, apprenticeships with craftspeople, and local archival explorations.
- **Field-Based Learning:** Community fieldwork supports behavioural education and experiential learning, as recommended by NEP 2020.
- **Collaborative and Multilingual Learning:** Group activities using multilingual resources enhance comprehension and inclusivity.
- **Integration of Art and Performance:** Folk storytelling and dramatizations help interpret cultural and historical narratives.
- **Blended Learning & Digital Archiving:** Use low-cost digital tools to record oral narratives and create local knowledge repositories- aligns with NEP's push for edtech where appropriate.
- **Service Learning & Internships:** Facilitate community projects (e.g., restoration of a water body) that blend civic responsibility with practical learning.

Rationale for Integrating IKS into Social Science Education

- **Cultural Relevance:** Learners relate better to content rooted in their cultural context, increasing motivation.
- **Plural Perspectives:** Counteracts monolithic historical narratives and exposes students to multiple ways of knowing.
- **Critical Thinking:** Analysing diverse sources fosters historical criticism and comparative analysis skills.
- **Environmental and Sustainable Practices:** Traditional ecological knowledge can inform contemporary discussions on sustainability and resource management.
- **Civic Identity:** Teaching indigenous political ideas and institutions can enrich understanding of governance and civic values.

Epistemological Features of IKS Relevant to Social Sciences

- 1) **Pluralism:** Multiple schools of thought and diverse local practices coexist — useful for teaching comparative perspectives.
- 2) **Contextual Knowledge:** Many IKS elements are place-based and situated — aligns with case-study pedagogies in geography and history i.e. *Rigveda*, *Mahabharata*, *Ramayana*.
- 3) **Oral and Textual Traditions:** Knowledge transmission through both written texts and oral practices — requires expansion of source material in classrooms.
- 4) **Interdisciplinarity:** Traditional knowledge often blends ethics, governance, economy and environment — helpful for integrated social science projects.
- 5) **Value Orientation:** Many systems incorporate normative frameworks (dharma, duties, community norms) — offering material for civics and moral reasoning when handled critically.
- 6) **Art and Culture:** Indian school of thoughts includes the mastery of as many of the 64 traditional arts known as the Chausath Kalas or Chathusashti Kalas, formed an important basis in the development of a cultured individual in many parts of ancient India.

Pedagogical Approaches for IKS in Social Science Teaching

- **Project-Based Learning (PBL):** Encourages students to document local governance, art-craft traditions and ecological practices.

These pedagogies reflect NEP 2020's learning outcomes-creativity, problem-solving and ethical reasoning.

Curriculum Design and Implementation Strategies

Curriculum development for IKS integration should adhere to the following principles:

- **Thematic Integration:** Embed IKS themes such as governance, economy and environmental ethics within history, civics and geography.
- **Competency Mapping:** Align learning outcomes with NEP's focus on analytical and critical skills.
- **Contextualization:** Adapt IKS content to local cultural and linguistic settings to ensure relevance and authenticity.
- **Teacher Autonomy:** Allow flexibility for teachers to design projects and field activities.
- **Use of Technology:** Develop digital archives and local heritage repositories to preserve IKS materials.

The design of curriculum is categorised according to the following grades.

- **Grades 6–8 (Foundational-Preparatory):** Local histories, festivals, folk governance stories, simple ecological practices (sacred groves, water-harvesting folklore); project: mapping local heritage sites.
- **Grades 9–10 (Middle Secondary):** Source analysis (inscriptions, traveler accounts, folk narratives), local economic systems (craft clusters), governance traditions (panchayat histories); project: oral-history portfolios.
- **Grades 11–12 (Senior Secondary):** Critical historiographies, comparative governance models, traditional ecological knowledge and policy implications, debates on modernization vs. indigenous practices; project: action research linking local practice to contemporary policy (e.g., water management, environment conservations, deep drive plantation).

Each grade band includes learning outcomes mapped to NEP competencies: critical thinking, communication, collaboration, ethical reasoning, and local-global awareness.

Whereas Social Science is combination of the following subjects-

- **History:** Re-examine sources, include regional literatures i.e. literature Sangam, ancient Gurukul education system, local archives, and oral histories; teach multiple historiographies (colonial, nationalist, subaltern, indigenous). Case studies: village governance, medieval trade networks, local movements.
- **Geography:** Integrate traditional environmental management practices, sacred groves, irrigation systems (step wells, tanks), and land-use knowledge.
- **Civics/Political Science:** Study pre-modern and non-western institutions (panchayat traditions, guilds, monastic orders), constitutional ideas in indigenous political thought, ethical frameworks for governance.
- **Economics:** Include traditional craft economies, barter systems, guild regulations, agrarian practices and local market institutions.
- **Sociology/Anthropology:** Use ethnographic methods to study caste, kinship, rituals, arts, culture, philosophy, health, behavioural education and social organisation; validate oral narratives as data.

Teacher Education and Professional Development

Teacher's competency and confidence will integrate IKS with Social Science successfully. Emphasize on professional development is necessary.

- **Pre-service Training:** Curriculum theory, local historiography and methods for handling oral sources should be included in teacher education.
- **In-service Workshops:** Continuous training on source-criticism, inclusive pedagogy and project-based methods.
- **Resource Kits:** Provide teachers with annotated sourcepacks, lesson plans and assessment rubrics.
- **Community of Practice:** Encourage local networks of teachers to share resources, case-studies and experiences.
- **Pre-Service Curriculum:** Incorporate IKS modules in B.Ed and teacher education which covers historiography, oral methodologies, multilingual pedagogy and ethics.
- **In-Service Training:** Short courses and micro-credentials (aligned with NEP's emphasis on continuous professional development) on curricular design, assessment, and community engagement.
- **Resource Kits & Digital Repositories:** Provide teachers with annotated sources, lesson plans, assessment rubrics, and templates for fieldwork documentation.
- **Mentoring and Communities of Practice:** Pair experienced researchers and local knowledge-bearers with teachers through university-school partnerships.

Teacher preparedness is vital for IKS integration. Pre-service teacher education must include modules on Indian epistemologies, oral history methodologies and ethics (Rao, 2019). In-service programs should focus on resource development, assessment design and community engagement. The NEP 2020-mandated National Professional Standards for Teachers (NPST) can serve as a framework for competency-based teacher development (NCERT, 2021).

Assessment

In line with NEP 2020's competency-based model, assessment should be formative, reflective and project-oriented. It includes

- **Peer and Self-Assessment:** Encourage metacognitive reflection as required by NEP's formative assessment emphasis.
- **Performance-Based Assessment:** Projects, presentations, portfolios documenting fieldwork and local research.
- **Analytical Essays:** Evaluation of students' understanding of comparative social structures and indigenous practices.
- **Rubrics for Source Use:** Evaluate ability to contextualise, critique, and triangulate different kinds of evidence.
- **Competency-Based Rubrics:** Assess analytical skills, source use, ethical engagement and communication rather than memorisation.
- **Portfolios and Project Assessment:** Student portfolios documenting fieldwork, interviews, reflections and artefacts as summative evidence.
- **Standardised Tasks for Equity:** Maintain a balance—allow local projects while using common prompts for comparability across other academic institutions.
- **Presentations and Exhibitions:** Students present findings to communities and peers, bridging school and society.

4. Ethical and Epistemic Challenges

Integrating IKS requires attention to ethics, representation, and consent. Educators must avoid essentializing traditions or romanticizing the past. Communities must be credited and their consent secured for documenting knowledge. Intellectual property rights (IPR) and data protection norms should guide field-based projects (Smith, 2012). Various challenges are

- 1) **Essentialisation:** Risk of treating IKS as a monolith; must emphasise internal diversity and historic change.
- 2) **Romanticisation vs. Critique:** Avoid uncritical glorification of traditions; teach both achievements and limitations.
- 3) **Power and Representation:** Be careful not to privilege elite or dominant groups' narratives; include marginalized voices.
- 4) **Appropriation and Consent:** Ethical fieldwork demands consent, acknowledgment, and fair representation of communities.
- 5) **Securitisation of Knowledge:** Some traditional knowledge (rare medicinal practices, sacred rituals) may be sensitive; safeguard community rights.

5. Classroom Practices

- 1) **Local Case Studies:** Field visits to heritage sites, interviews with elders, and documentation of local practices, local water management projects, oral history of a market town and economy study of local craft.
- 2) **Source Analysis Workshops:** Comparing archival texts, inscriptions, travelers' accounts, and oral narratives for bias and context.
- 3) **Project-Based Learning:** Students design projects on traditional water management, crafts, festivals, or local governance models.

- 4) **Role Play and Simulations:** Recreate historical assemblies, trade negotiations, or village panchayats to teach institutional functions.
- 5) **Collaborations with Local Knowledge-Bearers:** Invite artisans, healers, and community leaders to share practices and narratives.
- 6) **Digital Archiving:** Student projects to record, digitise, and annotate local sources and oral histories. Multiple online platforms and applications to upgrade the latest tech aids for learning.

6. Recommendations

- 1) Adopt a pluralistic, evidence-based approach to integrate IKS into curricula.
- 2) Prioritise teacher training and resource development focused on local histories and oral methods.
- 3) Use project-based and inquiry-led pedagogy to connect classroom learning with community knowledge.
- 4) Reform assessments to value research, documentation and critical analysis over memorisation.
- 5) Ensure ethical safeguards for communities contributing knowledge—consent, acknowledgment and benefit-sharing.
- 6) Encourage research collaborations to document, evaluate and interpret IKS for educational use.
- 7) Embed IKS as a cross-cutting, multidisciplinary thread in social science curricula from Grade 6 onwards, aligned to NEP competencies.
- 8) Invest in teacher education (pre-service and in-service) with micro-credentials and continuous professional development pathways.
- 9) Develop open, multilingual resources, online platforms, applications and OER repositories curated by NCERT/state boards in collaboration with universities.
- 10) Pilot implementation in diverse districts and fund district resource centres for archiving and training local customs, rituals, festivals etc.
- 11) Design assessments that prioritise portfolios, projects, and competency rubrics while retaining comparable tasks for equity.
- 12) Create ethical guidelines and review mechanisms for documenting and using community knowledge.

7. Conclusion

Integrating the Indian Knowledge System into social science teaching aligns with NEP 2020's vision of holistic, experiential and culturally grounded education. This approach not only revives indigenous intellectual traditions but also enriches civic and ethical understanding among learners by developing a global citizen. A deliberate and ethical implementation strategy—anchored in teacher capacity, community engagement, and continuous evaluation—will ensure that IKS integration enhances both quality and inclusivity in education. It presents a promising pathway to contextualised, pluralistic, and engaged learning. When implemented with scholarly rigor, ethical sensitivity, and pedagogical creativity, IKS can deepen students' understanding of social processes, enhance civic consciousness, and preserve cultural knowledge. The task is not to replace established disciplinary methods but to expand

them - cultivating critical citizens who appreciate both local knowledge and global perspectives. The inclusion of IKS in social science teaching offers transformative potential but also presents challenges. Standardization pressures, lack of teacher training and ideological biases may hinder effective implementation. Balanced curricular design—combining indigenous insights with modern analytical frameworks—can mitigate these risks. Moreover, collaboration among universities, local communities and educational boards will be essential for sustained success.

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