

An Analytical Study: Indian Knowledge System (IKS), Epistemology, and Ethics in NEP 2020

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Abstract:

Education is the fundamental pillar of any nation's intellectual and cultural upliftment. India's knowledge tradition, nurtured by global centers like Takshashila and Nalanda, has been one of the oldest and most prosperous systems in the world. In Indian thought, the meaning of 'knowledge' (Jnana) is not merely the accumulation of information, but a means of 'liberation' (Mukti) and 'self-realization' (Atmabodha). The motto "Sa Vidya Ya Vimuktaye" (Education is that which liberates) propounds this core philosophy of Indian education, where knowledge frees humanity from the shackles of ignorance and molds them into complete individuals. Unfortunately, during the colonial period, Macaulay's education system impacted this glorious tradition, causing the Indian education system to drift away from its foundational roots, relegating the country's ancient wisdom and self-pride to the margins. In the present era, the National Education Policy (NEP) 2020 is a bold attempt to rectify this historical error and reconnect Indian education with its cultural values. The Indian Knowledge System (IKS) is not merely a glorification of the past; rather, it is an integrated framework of science, mathematics, logic, and philosophy. Its greatest strength lies in its 'Epistemology' (Jnana Mimansa). While Western philosophy has primarily been based on materialistic and sensory experiences, Indian philosophy provided a structured form for the search for truth through Pramana Shastra (the science of valid knowledge). The 'Pramanas' (means of knowledge) Pratyaksha (perception), Anumana (inference), Upamana (comparison), and Shabda (testimony) propounded by Maharshi Gautama, the founder of Nyaya philosophy, remain remarkably close to the logical methods of modern scientific research. This ancient method cultivates 'curiosity' and 'logic' in the student instead of a tendency toward rote learning. The process of moving from 'doubt' (Samsaya) to 'resolution' (Samadhana) is the traditional form of the modern era's 'Critical Thinking.' IKS teaches that the investigation of truth is not limited to laboratories alone but is based on a profound harmony between logical analysis and experience. The inclusion of the Indian Knowledge System under NEP 2020 not only makes modern education more relevant but also provides it with a strong ethical and philosophical foundation. By bridging ancient wisdom with a modern scientific outlook, it lays the foundation for a future-oriented education model that ensures the holistic development of the student, while simultaneously making them a responsible citizen who is connected to their roots and capable of facing global challenges.

Keywords: Indian Knowledge System, Epistemology, Ethics, National Education Policy (NEP) 2020, and Value-based Education.

1.0 Introduction:

Education is the foundational pillar of any nation's cultural, social, and intellectual upliftment. India's knowledge tradition has been one of the oldest and most prosperous in the world, where knowledge was

considered not merely a collection of information, but a means of 'Mukti' (liberation) and 'Atmabodha' (self-realization). In ancient times, universities like Takshashila, Nalanda, and Vikramshila were not only global centers of knowledge but also living examples

of Indian epistemology and ethics. The core mantra of Indian philosophy has been "*Sa Vidya Ya Vimuktaye*," meaning that education is that which liberates humans from ignorance and bondage. However, during the colonial era, Macaulay's education system severed the Indian education system from its roots and implemented a framework that pushed Indian wisdom and self-pride to the margins. The Indian Knowledge System (IKS) is not merely a subject of history; it is a holistic framework of science, logic, mathematics, spirituality, and philosophy. Its uniqueness lies in its 'Epistemology' (*Jnana Mimansa*). While Western philosophy has often focused on sensory and materialistic knowledge, Indian philosophy emphasized the search for truth through '*Pramana Shastra*' (the science of valid knowledge). Maharshi Gautama, in the *Nyaya Sutras*, clarified that the attainment of true knowledge is possible only through four *Pramanas* (means of knowledge): *Pratyaksha* (perception), *Anumana* (inference), *Upamana* (comparison), and *Shabda* (testimony). This methodology develops logical and analytical capabilities in students to move from 'doubt' to 'resolution,' rather than encouraging rote learning—a principle that remains entirely relevant in today's scientific age. The second essential aspect of education is 'Ethics.' In the Indian context, ethics is inspired by the concept of '*Dharma*,' which does not mean religion, but 'duty' and 'virtuous conduct' (*Sadachara*). In the ancient Indian educational system, '*Vinaya*' (humility/discipline) was considered mandatory alongside '*Vidya*' (knowledge). In the current era, where technology and materialism are at their peak, the need for Indian ethical values such as *Ahimsa* (non-violence), *Satya* (truth), and *Karuna* (compassion) has increased significantly. As Swami Vivekananda said, "We need that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet." This quote clarifies that the ultimate goal of education is not just livelihood, but the construction of an ethical personality. In the *Amrit Kaal* of independence, the 'National Education Policy (NEP) 2020,' announced by the Government of India, is a revolutionary step toward the 'Indianization' of education. The policy clearly acknowledges that to make India a 'Global Knowledge Superpower,' we

must return to our cultural and linguistic heritage. The core document of NEP 2020 (Paragraph 4.27) underlines that "Indian knowledge systems, including tribal knowledge and indigenous and traditional ways of learning, will be covered and included in the curriculum in an accurate and scientific manner." This policy not only advocates for the inclusion of IKS but also attempts to weave ancient Indian teaching methods, such as 'Experiential Learning,' into the modern framework.

2.0 Need for the Study:

The primary objective of this research paper is to analyze how the principles of the Indian Knowledge System (IKS), Epistemology (*Jnana Mimansa*), and ethics can be integrated into the modern educational framework through the National Education Policy (NEP) 2020. This study explores the methodology for establishing harmony between ancient wisdom and 21st-century skills, ensuring that students are not only academically excellent but also ethically grounded and proud of their cultural heritage. This research is an endeavor toward realizing the Indian vision of global citizenship, where knowledge and morality coexist.

3.0 Review of Literature:

In this research, a comprehensive analysis of the available authentic literature has been conducted to understand the philosophical and policy dimensions of the Indian Knowledge System (IKS). The review of literature clarifies that the nature of knowledge and the means of its attainment are described with great subtlety in Indian philosophy. While the Western approach has often been divided between empiricism and rationalism, Indian scholars have presented a more integrated perspective through the '*Pramana Shastra*' (the science of valid knowledge) as described in Maharshi Gautama's *Nyaya Sutras*. According to scholars, '*Pramanas*' (means of knowledge) such as *Pratyaksha* (perception), *Anumana* (inference), *Upamana* (comparison), and *Shabda* (testimony) do not merely make a student a consumer of information, but an inquirer of truth. This methodology stands parallel to the modern scientific method, which

emphasizes evidence and logical analysis. The literature available on ethics and value-based education, particularly the study of the educational philosophies of Swami Vivekananda and Mahatma Gandhi, proves that education without character building is detrimental to society. In Gandhi's principles of '*Nai Talim*' and Vivekananda's concept of 'Man-making,' morality is considered the soul of education, which strengthens social and emotional learning in students and helps in shaping them into responsible global citizens. Finally, an analysis of the policy documents related to the National Education Policy (NEP) 2020 and contemporary research indicates that this policy is a bold attempt to transform the colonial educational framework and bring the Indian Knowledge Tradition (IKS) into the mainstream. Experts believe that Chapter 4 of the policy acts as a 'bridge' between ancient epistemological methods and modern technical requirements. This not only restores the glory of Indian wisdom but also presents it as an essential skill for the 21st century. Thus, the available literature provides a foundation for the premise that the synthesis of knowledge, ethics, and current policy is capable of giving birth to 'Holistic Education.'

4.0 Research Objectives:

The primary research objectives of this study are as follows:

1. **To Analyze the Philosophical Foundations of the Indian Knowledge System (IKS):** To conduct an in-depth study of the principles of 'Epistemology' (*Jnana Mimansa*) and the 'Science of Valid Knowledge' (*Pramana Shastra*) inherent in the ancient Indian knowledge tradition, and to clarify their scientific relevance in the modern context.
2. **To Outline the Role of Ethical Foundations in Education:** To analyze the principles of '*Dharma*' (duty/moral order) and '*Sadachara*' (virtuous conduct) as described in Indian philosophical thought, and to understand how value-based education can contribute to character building and the fostering of global citizenship among students.
3. **To Evaluate the Provisions of the National Education Policy (NEP) 2020:** To conduct a

critical study of the specific chapters and recommendations of NEP 2020 that propose integrating Indian Knowledge Systems and traditional ethical values into modern school and higher education curricula.

4. **To Establish Synergy Between Ancient Wisdom and Modern Skills:** To explore how the principles of Indian epistemology and ethics can be synthesized with 21st-century goals—such as 'Critical Thinking,' 'Problem Solving,' and 'Holistic Development'—to design a future-oriented education model.

5.0 Research Methodology:

This study primarily falls under the category of 'Descriptive and Analytical Research.' It involves a comparative and critical analysis of ancient Indian philosophical principles in relation to modern educational policies.

6.0 The Philosophical Foundations of the Indian Knowledge System (IKS):

The philosophical foundation of the Indian Knowledge System (IKS) is robust and logical, anchored in *Jnana Mimansa* (Epistemology), known in the Indian tradition as *Pramana Shastra* (the science of valid knowledge). While Western philosophy has often oscillated between rationalism and empiricism, Indian sages conducted a precise scientific analysis of the nature, validity, and sources of knowledge. In Indian philosophy, the means of attaining valid knowledge (*Prama*) is called *Pramana*. Maharshi Gautama, in his *Nyaya Sutras*, clarified that four primary *Pramanas Pratyaksha* (perception), *Anumana* (inference), *Upamana* (comparison), and *Shabda* (testimony) are essential. These are not merely philosophical reflections but represent an authentic scientific methodology for arriving at the truth. *Pratyaksha*, which arises from the contact between the senses and the object, is akin to modern 'observation,' while *Anumana* lays the foundation for logical deduction by discovering the unknown through known evidence. Similarly, *Upamana* provides knowledge based on analogy, and *Shabda* is based on the authoritative statements of experts. As

mentioned in *Nyaya Darshana* (1.1.3), "*Pratyakshanumanopamanashabdah Pramanani*," meaning these four are the real and scientific instruments of knowledge.

6.1 The Scientific Nature of Indian Epistemology:

The scientific nature of Indian epistemology lies in the fact that it does not accept information as 'knowledge' until it passes the test of *Pramana*. The modern scientific method of 'Hypothesis Testing' is fundamentally based on the Indian principles of *Anumana Pramana* and *Vyapti* (Universal Relation), ensuring that conclusions are not mere coincidences but universal laws. The National Education Policy (NEP) 2020 strives to revive this logical foundation. According to the policy, the goal of education is not rote learning, but the development of 'Critical Thinking,' which is deeply rooted in the Indian tradition of *Vada-Prativada* (dialectic debate). Clause 4.27 of NEP 2020 explicitly states that the integration of the Indian Knowledge System must be done in a scientific and logical manner so that students become mentally resilient to face future challenges.

6.2 The Interrelation of Knowledge and Ethics:

The interrelation between knowledge and ethics is a unique feature of the Indian tradition, where the search for 'Truth' is not mere intellectual indulgence but a moral pursuit and '*Dharma*.' The ultimate goal of knowledge is character building and ensuring public welfare (*Sarva Jana Hitaya*). As described in the *Vishnu Purana*, "*Sa Vidya Ya Vimuktaye*"—that education is true which liberates man from ignorance, narrow-mindedness, and moral bondage. Swami Vivekananda also emphasized an education that builds character and develops the intellect. Modern 'Value-based Education' is the contemporary manifestation of this ancient Indian ethics, which NEP 2020 prioritizes. In conclusion, the philosophical foundations of the IKS were not only relevant in ancient times but are capable of providing precise guidance in today's digital and scientific age. The successful integration of the logic of *Pramana Shastra* and ethics can fulfill NEP 2020's goal of making India a 'just and vibrant knowledge society.'

6.3 The Role of Ethical Foundations in Education:

Understanding the role of ethical foundations in education is an urgent necessity for modern global society, as the true purpose of education is not merely to provide literacy but to awaken wisdom and virtue (*Sadachara*) within the individual. In Indian philosophical thought, the root of morality lies in the concept of '*Dharma*', which is defined not in the narrow sense of religion or sect, but as universal duties and virtuous qualities. According to Maharshi Manu, the ten characteristics of *Dharma Dhriti* (patience), *Kshama* (forgiveness), *Dama* (self-control), *Asteya* (non-stealing), *Shaucha* (purity), *Indriya-Nigraha* (control of senses), *Dhee* (wisdom), *Vidya* (knowledge), *Satya* (truth), and *Akrodha* (absence of anger)—provide a complete roadmap for an individual's moral development. In Indian tradition, ethics is not a theoretical subject but a practical discipline practiced through '*Sadachara*' (excellent conduct). As Swami Vivekananda (1897) noted, "We need that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet." This highlights that value-based education is the medium that fosters internal discipline, allowing a student to balance personal benefit with social responsibility.

6.4 Value-Based Education in the Global Perspective:

In the current global perspective, value-based education is not limited to local or national boundaries but is a powerful tool to foster the concept of 'Global Citizenship.' The Indian principle of '*Vasudhaiva Kutumbakam*' (the whole world is one family) lays the foundation for this global morality. When values like truth, non-violence, and *Aparigraha* (non-possessiveness) are instilled in a student, they become sensitive to their surroundings and adopt a responsible approach toward global issues like the environmental crisis, war, and inequality. NEP 2020 advocates making this philosophical foundation the center of the modern curriculum so that education can build a 'just and equitable' society. According to the policy, the ultimate goal of education is to develop an individual

capable of rational thought, imbued with virtues like compassion, empathy, courage, and scientific temper. Incorporating ethics into education teaches students to distinguish between 'truth' and 'falsehood,' the first step toward character formation. The famous invocation from the Upanishads, "*Asato Ma Sadgamaya*" (Lead us from the unreal to the real), points toward this education, which dispels ignorance and leads man toward moral light. In conclusion, if Indian philosophical principles and elements of *Sadachara* are scientifically integrated into the education system, it will not only create successful professionals but also sensitive global citizens committed to the welfare of humanity. This holistic approach alone can enable India to once again provide moral and intellectual leadership to the world.

Here is the English translation of your analysis on the Indian Knowledge System (IKS) and its integration with modern education:

7.0 Philosophical Foundations of the Indian Knowledge System (IKS): Epistemology and Pramana Shastra:

Indian epistemology (*Jnana Mimansa*) examines the means of acquiring knowledge and its validity. Under *Pramana Shastra*, six primary means of knowledge are recognized: *Pratyaksha* (perception), *Anumana* (inference), *Upamana* (comparison), *Shabda* (testimony), *Arthapatti* (postulation), and *Anupalabdhi* (non-apprehension). These are not merely spiritual concepts but provide a logical and scientific foundation. *Pratyaksha* is based on observation and experimentation, paralleling empirical science, while *Anumana* prioritizes logical inference, closely aligned with statistics and predictive modeling.

In the modern context, the scientific nature of IKS lies in viewing 'knowledge' not just as information, but as experience and self-realization. It provides a systematic process for the 'search for truth.' In today's data-driven world, flooded with information, Indian *Pramana Shastra* teaches us how to distinguish authentic knowledge from falsehood through logic and evidence. This tradition builds a bridge between 'objectivity' and 'subjective experience,' which can

serve as a complementary framework for modern science.

8.0 The Role of Ethical Foundations in Education: 'Dharma' and 'Sadachara':

In Indian philosophical thought, '*Dharma*' does not mean a narrow religion, but rather the 'sustaining principle' that organizes society and the universe. Integrating *Dharma* into education teaches students 'responsibility' alongside 'skill.' The principle of '*Sadachara*' (virtuous conduct) fosters self-control and compassion within an individual.

Value-based education shifts a student from being 'self-centered' to 'community-centered.' When the goal of education is character building, it awakens a sense of global citizenship in the student. The ethos of '*Vasudhaiva Kutumbakam*' (the world is one family) in Indian thought makes an individual accountable not just to their nation, but to all of humanity. By incorporating *Sadachara* into the curriculum, we address issues like violence, corruption, and mental stress. This system emphasizes 'holistic development,' where knowledge meets wisdom, enabling the student to emerge as a sensitive and ethically strong global citizen.

9.0 National Education Policy (NEP) 2020: Integration of Traditional Knowledge:

NEP 2020 is a revolutionary document in the history of Indian education, calling for a return to 'Indian roots.' The policy emphasizes a 'multidisciplinary approach' and the 'integration of culture and values.' NEP 2020 clarifies that to make India a 'Global Knowledge Superpower,' we must incorporate our traditional knowledge systems into the modern curriculum.

The policy recommends including subjects like Ayurveda, Yoga, Indian Mathematics, Architecture, and Philosophy in higher education. This is not merely about reminiscing about the past, but maintaining the 'continuity of knowledge.' It prioritizes 'value-based education' at the school level so that students feel proud of their identity. The vision of NEP bridges the gap between modern technology and ancient wisdom. It creates a flexible curriculum

that connects local knowledge with global standards, ensuring the intellectual and cultural growth of the student.

10.0 Ancient Wisdom and Modern Skills: A Future-Oriented Model:

21st-century skills such as 'Critical Thinking,' 'Problem Solving,' and 'Holistic Development' have deep roots in Indian knowledge traditions. The ancient 'Guru-Shishya' tradition and the 'Dialectical Method' (*Vada-Prativada*) were advanced forms of modern critical thinking. By adopting the Indian philosophical concept of '*Anekantavada*' (many perspectives on truth), we can develop a problem-solving model for today's complex global challenges.

To prepare a future-oriented education model, we must make technology the 'means' and Indian values the 'end' (goal). When we combine focus through 'Yoga' and logical purity through 'Nyaya Shastra' with modern 'coding' or 'management,' we produce a 'holistic' student who is emotionally stable and intellectually sharp. This model does not merely create job-seekers, but 'creators' and 'thinkers.' Thus, the synergy between ancient wisdom and modern skills is the foundation of a future where technological progress and human sensitivity walk hand-in-hand.

11.0 Conclusion:

The inclusion of the Indian Knowledge System (IKS) in modern education is not merely an academic reform, but a proud endeavor to return to our intellectual roots. The aforementioned analysis clarifies that the 'Epistemology' (*Jnana Mimansa*) and 'Science of Valid Knowledge' (*Pramana Shastra*) inherent in the Indian tradition provide a mature framework of logic, experience, and scientific inquiry that is highly relevant to today's 'data-driven' world. The true purpose of education is not just the collection of information, but character building and the development of an ethical consciousness based on '*Dharma*'. When we make values like '*Vasudhaiva Kutumbakam*' (the world is one family) the foundation of the curriculum, we prepare not only skilled professionals but responsible global citizens. The vision of NEP 2020 to combine Indian

knowledge with modern skills presents a future-oriented model. This model not only achieves 21st-century goals such as 'Critical Thinking' and 'Holistic Development' but also provides them with a strong cultural foundation. The synthesis of ancient wisdom and modern science is the path that will establish India as a 'Global Knowledge Superpower.' This balance is capable of resolving complex future challenges such as environmental crises, mental stress, and technical ethics. If we can integrate the depth of our ancient education system with the dynamism of modern technology, education will emerge as a beacon that will prove to be a guiding light not only for India but for the welfare of all humanity. This synergy will give birth to a learning culture where the foundation of innovation is empathy and the goal of progress is '*Sarvajan Hitay*' (the welfare of all).

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