Gleaning Wisdom from Ancestral Heritage: Indigenous Knowledge Traditions and the National Education Policy

Amit K Suman

Assistant Professor, Kirori Mal College, University of Delhi, India

Saurabh Kumar Shanu

PhD Scholar, Department of History, University of Delhi, India

Abstract

The National Education Policy (NEP) of 2020 marks a significant turning point in India's educational landscape. This policy, deeply rooted in indigenous knowledge systems, seeks to both draw from and refine these traditions to address the needs of contemporary society. Inspired by Mahatma Gandhi's NaiTalim, the NEP seeks to lay the groundwork for education, that embodies inclusive principles reminiscent of pre-colonial systems that were eroded during the colonial era, only to be replaced by an ill-suited Eurocentric model. This research paper endeavours to demonstrate the NEP's dedication to reviving indigenous wisdom and incorporating it into the modern educational framework. To provide context, the study explores the historical impact of colonialism on Indian education, shedding light on how indigenous knowledge systems were marginalized and supplanted. The paper then delves into the NEP's guiding principles, highlighting its holistic approach to education, promotion of multilingualism, and emphasis on vocational training - all of which resonate with India's rich heritage. Moreover, this research underscores the NEP's significance in nurturing a sense of cultural identity and promoting a more equitable and inclusive educational system. By conducting a comprehensive analysis of the NEP's objectives and initiatives, this paper underscores its potential to bridge the gap between traditional wisdom and contemporary needs, ultimately fostering a robust, globally competitive educational system deeply rooted in Indian culture. This contribution aims to enrich the ongoing discourse on education reform and the resurgence of indigenous knowledge, emphasizing the pivotal role played by the NEP in effecting this essential transformation.

Keywords: National Education Policy, 2020; NaiTalim, Indigenous Knowledge, Western Education.

Introduction

The National Education Policy 2020 (referred to as NEP) stands as a visionary document, with its central goal aimed at providing widespread access to high-quality, affordable, and equitable education. This policy marks a significant departure from the past, spanning 36 years, and its vision is to transform education to meet the evolving demands of the 21st century. Rooted in Mahatma Gandhi's philosophy of education that fosters character and instils inner virtues, the NEP endeavours to leverage India's rich traditional knowledge systems. It creates a framework designed to address the nation's needs a century after gaining independence. Aligned with the 2030 Sustainable Development Goals, the NEP aspires to usher in a transformative shift within schools and universities, transforming them into flexible, multidisciplinary institutions that nurture critical thinking and provide practical knowledge. By recognizing the inherent value of India's traditional learning and wisdom, the NEP reinforces its commitment to sustainability and inclusivity, ultimately working towards the well-being of all. This underscores the pressing importance of comprehending our own knowledge systems to rectify the shortcomings in our existing education system and equip individuals to face the challenges of the future, representing the initial step towards the realization of universal education.

This paper aims to illustrate how the National Education Policy (NEP) is firmly rooted in indigenous knowledge systems while adapting and refining them to meet contemporary needs. Inspired by Gandhi's Nai Talim, the NEP seeks to establish India's educational foundation based on inclusive principles reminiscent of pre-colonial systems that were eroded during colonial rule, replaced by an ill-suited, Eurocentric model. Colonial intervention in knowledge formation resulted in the reconfiguration of existing systems to serve colonial interests, effectively exerting control over the minds and bodies of Indians. In the 19th century, the British initiated the categorization and compartmentalization of indigenous knowledge, recognizing its potential power. Foucault's concept of power and knowledge underscores their inherent interdependence, highlighting their inseparability.

The colonialists positioned themselves as the ultimate authority on indigenous knowledge and culture, understanding the power inherent in knowledge and its pivotal role in shaping cognitive processes, thereby reinforcing their dominance. The NEP represents an effort to challenge the perceived superiority of Western knowledge, advocating for a return to India's indigenous modes of thinking and education that flourished before colonial influence. This paper will delve deeper into the NEP's objectives and its vision for India in 2047, as the country celebrates its centenary of independence. Moreover, it will address the limitations and challenges embedded within the Policy document.

The "Curricular Integration of Essential Subjects, Skills, and Capacities" section of the NEP 2020 places considerable importance on recognizing the significance of indigenous knowledge and skills rooted in India, underscoring their potential contributions to shaping a modern India. The NEP adopts an inclusive approach to define the concept of "Knowledge of India", encompassing not only ancient wisdom but also recognizing the diverse wealth of tribal and various other forms of knowledge that have thrived within the Indian context. This perspective is articulated in section 4.27 of the NEP:

"The concept of 'Knowledge of India' will involve a comprehensive grasp of ancient India and its lasting impacts on contemporary India, covering both accomplishments and challenges. It will also involve a forward-looking perspective on India's ambitions in critical areas such as education, health, and the environment. These dimensions will be thoughtfully and systematically integrated into the school curriculum where relevant. Specifically, Indian Knowledge Systems, encompassing tribal knowledge and traditional indigenous methods of learning, will be seamlessly integrated into various subjects including mathematics, astronomy, philosophy, yoga, architecture, medicine, agriculture, engineering, linguistics, literature, sports, games, and areas related to governance, politics, and conservation".

The NEP aspires to reshape the curriculum and teaching methods to harmonize with indigenous learning practices, with the aim of making education more relatable, relevant, engaging, and effective. The indigenous knowledge systems and teaching approaches held the potential to develop into a nationwide education system, like the models established in advanced Western nations that were rooted in traditional knowledge, despite their inherent limitations and challenges. Regrettably, during the colonial rule, the adaptability, evolution, and expansion of the Indian education system were hindered. If those in positions of authority had recognized the necessity of nurturing and enhancing these indigenous schools, they could have achieved for Indian education what voluntary schools accomplished for mass education in England. Scholars like Adam argued that India had the capacity to establish a national education system based on the local school model. The NEP aims to integrate the attributes of indigenous educational institutions into the modern framework.²

The vision of NEP 2020 is to guarantee universal access to education for all, in alignment with the provisions of the 86th Constitutional Amendment Act of 2002, this establishes access to free and compulsory education as a Fundamental Right for children between the ages of 6 to 14. One of the primary objectives of NEP is to achieve Universal Elementary Education (UEE). UEE is considered attained when every citizen of the country can read, write, and perform basic arithmetic tasks, often referred to as the 3Rs – Reading, Writing, and Arithmetic. Despite constitutional and legal amendments aimed at making education accessible and equitable, India, even after more than 75 years of independence, has not fully realized UEE.³

¹National Education Policy, 2020.

²National Education Policy, 2020.

³The Right to Free and Compulsory Education Act of 2009 ensures that all children between the ages of 6 and 14 have the entitlement to free and mandatory access to school, with the requirement of regular attendance and successful completion. This act establishes a legal framework that is enforceable by law. It not only upholds children's rights to receive a quality education but also emphasizes the principles of equality and non-discrimination. Importantly, it safeguards children's right to an education that is free from stress, anxiety, and worry.

In 1835, Thomas B. Macaulay, in his influential Minute on education, made the assertion that "a single shelf of a good European library was worth the whole native literature of India and Arabia". ⁴ This statement had a profound impact on the direction of education policies in India, extending far beyond the period of British colonial rule. Macaulay envisioned a future where vernacular languages in India would gradually decline, and English would become the predominant language of the Indian population, who he imagined as being "Indians in blood and colour and English in taste". ⁵ This ideology was a key part of the colonial strategy to shape Indian minds, instil a sense of inferiority, and promoting Western knowledge as the sole legitimate form of knowledge, with English as the primary medium of instruction.

The colonial legacy in India has left a lasting impact on the educational landscape, particularly in terms of language instruction. The historical preference for English as the primary medium of teaching, alongside Hindi and Persian, created a disconnect for many students whose mother tongue was different. Numerous studies have consistently shown that children tend to perform better academically when taught in their native language. However, even in the post-colonial period, a preference for English persisted, especially in private schools. Recognizing the significance of mother tongue instruction, the NEP aims to address this issue. The policy encourages the use of the mother tongue as the medium of instruction up to the fifth grade and, ideally, up to the eighth grade and beyond. This policy would extend to both public and private schools, ensuring that high-quality textbooks and teaching materials are available in various languages. In this way, the NEP seeks to promote equality in education between public and privately funded institutions by emphasizing the importance of mother tongue instruction.⁶

In addition to advocating for mother tongue instruction, the NEP places a strong emphasis on promoting multilingualism. It recognizes that children have a remarkable capacity to learn languages, especially between the ages of 2 and 8, and that being multilingual offers significant cognitive benefits. To foster national unity and strengthen integration, the NEP supports the continuation of the three-language formula. This encourages students to learn three languages, which contributes to a deeper understanding of India's linguistic diversity. The NEP also highlights the rich heritage of classical languages in India. Safeguarding the literature, cultural wealth, and knowledge embedded in these languages is considered a national duty. As a result, the NEP includes classical languages such as Sanskrit, Persian, Pali, and Tamil as options in the school curriculum. According to the policy, every student in both public and private schools will have the opportunity to study an Indian classical language for a minimum of two years. This not only promotes an appreciation for the linguistic diversity of India but also contributes to the preservation of classical languages and their invaluable cultural contributions.⁷

The NEP 2020 recognizes that education should serve to enhance a person's cognitive capacities and ethical values, ultimately contributing to the formation of a fair and rational society. This foundational framework is to be established during a child's early years, and the policy places a distinct emphasis on nurturing an individual's creative potential. Crucially, this creative potential should not be assessed solely from a materialistic standpoint. Rather, evaluations of a person's creativity and potential should also consider their contributions to social and other spheres. The NEP emphasizes that education should be designed to cultivate not only foundational skills such as literacy and numeracy but also higher-order abilities like critical thinking and problem-solving. Additionally, it should foster the development of social, ethical, and emotional capacities and attitudes. To realize these aspirations, the NEP draws extensively from India's indigenous traditions of learning and education. The NEP acknowledges these rich cultural resources as valuable foundations upon which to construct a more inclusive, holistic, and effective education system:

"The National Education Policy (NEP) 2020 draws inspiration from the profound legacy of ancient and enduring Indian knowledge and philosophy. Within Indian thought, the quest for

⁴India Office Records of the British Library (henceforth IOR), Board's Collection, F/4/1846, no. 776, Minute of T. B. Macaulay, (2 February 1835).

⁵Ibid

⁶National Education Policy, 2020.

⁷National Education Policy, 2020.

knowledge (Jnan), wisdom (Pragyaa), and truth (Satya) has always been revered as the loftiest human pursuit. In ancient India, education was not merely about acquiring knowledge for navigating life in the present world or beyond schooling. Rather, its ultimate purpose was the comprehensive realization and emancipation of the self'.8

The National Education Policy (NEP) 2020 recognizes the imperatives of the 21st century and promotes a multidisciplinary approach to education, complemented by diverse exit options. India has a distinguished intellectual heritage exemplified by illustrious institutions like Nalanda and Takshashila, which imparted a holistic, interdisciplinary education and attracted scholars from around the world. The NEP takes this tradition forward by affording students multiple entry and exit points, empowering them to chart their unique educational journeys, thereby ensuring accessibility, customization, and alignment with individual needs and aspirations.

Indeed, the NEP 2020 heralds a flexible approach to education, granting students the autonomy to make informed decisions about their educational pathways. Following the completion of class 10, students will have the freedom to choose from a range of trajectories, including pursuing traditional academic courses, opting for vocational education, or exploring specialized courses or schools. This empowers students to take ownership of their education and select a path that resonates with their interests and ambitions. Moreover, the NEP underscores the holistic development of individuals, nurturing their moral, social, physical, emotional, and intellectual faculties. The NEP endeavours to empower students with essential 21st-century skills across a wide spectrum of disciplines, including the social sciences, sciences, languages, humanities, arts, as well as professional, technical, and vocational domains. This approach not only encourages ethical social engagement but also cultivates soft skills like effective communication and discourse, in addition to expertise in one or more areas. The multidisciplinary approach advocated by the NEP mirrors initiatives like the transdisciplinary humanities degree introduced by the University of Delhi, which seamlessly integrated digital technology by incorporating computer coding in the study of literature and its practical applications. The NEP seeks to promote similar interdisciplinary endeavours that stimulate critical thinking among students and dissolve the rigid distinctions between humanities and sciences, extracurricular and curricular activities, as well as academic and vocational streams. Such an approach aligns with the dynamic requirements of the 21st century.⁹

The analyses succinctly capture the historical context of education in colonial India and the multifaceted nature of the education policies imposed by the British Imperial government. The utilitarian objectives of creating a pool of clerks for administrative purposes, the divergent perspectives held by different stakeholders, and Thomas B. Macaulay's vision all underscore the complexities inherent in colonial education policies. It's crucial to recognize that education policies are often shaped by the specific interests and needs of those in power. In the case of colonial India, the British government's goals for education were closely tied to their administrative requirements, and this utilitarian approach influenced the type of education that was promoted. The paper's analysis effectively underscores the diverse objectives and motivations behind colonial education policies, shedding light on how education was utilized to advance the objectives of the colonial authority. This historical context provides valuable insights into the evolution of education in India and the enduring effects of colonial-era policies on the country's educational landscape.

The Macaulay Minute of 1835, a key historical event in British colonial India, was a policy statement presented by Thomas Babington Macaulay, a British historian and politician, who was a member of the Governor-General's Council. The main goal of this document was to promote the use of the English language as the medium of instruction in Indian education. Macaulay's argument was that the introduction of English education would produce a group of culturally Anglicized Indians, thereby enhancing their ability to serve the British colonial administration more effectively. The Macaulay Minute had profound and far-reaching effects on Indian education and society. This policy resulted in the extensive use of English as the language of higher education and governance, subsequently influencing multiple facets of Indian culture, politics, and intellectual discussions. Historical interpretations of the Macaulay Minute vary, with some regarding it as a pivotal moment

⁸National Education Policy, 2020, p. 4.

⁹National Education Policy, 2020.

that contributed to shaping modern India. English education played a pivotal role in the formation of an educated Indian elitewho made significant contributions to the Indian independence movement. However, others criticize the policy for its cultural imperialism and its impact on traditional Indian languages and knowledge systems. In summary, the Macaulay Minute is a significant event in the history of Indian education. Its effects continue to be felt in contemporary India, and it remains a subject of historical debate and analysis due to its lasting impact on the country's educational, cultural, and political landscape.¹⁰

Macaulay's recommendations, as outlined in the Macaulay Minute of 1835, were undeniably rooted in the imperialistic agenda of the British Empire in India. His core belief was that the introduction of English education would serve the interests of British colonial administration by creating a class of Indians who would be culturally aligned with the British. This alignment was expected to facilitate the governance of the colony. The central tenet of Macaulay's minute was the assertion of English cultural and linguistic superiority. He proposed that Indian students should be educated in English to adopt Western values and perspectives, a move seen to "civilize" the Indian population and establish a class of intermediaries between the British rulers and the Indian masses. A significant outcome of the Macaulay Minute was the marginalization of traditional Indian languages, as English was promoted as the predominant medium of instruction in Indian schools and colleges. This shift in language of instruction had a long-lasting impact on Indian education, as English became the language associated with privilege and progress. The Macaulay Minute marked a pivotal turning point in Indian education. It led to the creation of English-medium schools and the establishment of a Western-style education system. While it offered opportunities for some Indians to engage with modern knowledge, it also contributed to the emergence of a linguistic and cultural divide within the Indian population. In summary, the historical interpretation of the Macaulay Minute underscores its significance as a document reflecting British colonial policies designed to strengthen their rule in India. It had a profound influence on shaping the trajectory of Indian education, language, and culture during the colonial period and its aftermath.¹¹

During the pre-colonial period in India, there were five primary types of educational institutions, each catering to specific educational needs and communities:

- 1. Sanskrit Tols: These institutions provided higher education and were dedicated to the study of Sanskrit literature, philosophy, and related subjects. They were typically attended by scholars and students interested in traditional Indian knowledge systems.
- 2. Arabic Madrasas: Arabic madrasas offered advanced education in Arabic language and Islamic studies. They were instrumental in disseminating Islamic knowledge and were attended by students pursuing religious and theological studies.
- 3. Pathshalas: Pathshalas were elementary educational institutions that provided basic education to the masses. They focused on vernacular languages and foundational subjects, making education accessible to a broader segment of the population.
- 4. Maktabs: Like Pathshalas, maktabs were elementary schools that primarily offered instruction in basic literacy and numeracy. They played a crucial role in imparting essential skills to children.
- 5. Farsi (Persian) Schools: These educational institutions were dedicated to imparting knowledge of the Persian language and its literature. Persian served as the official language of the Mughal court, and proficiency in Persian was highly regarded among the Hindu and Muslim elite in the region.

These educational institutions were distinct from one another, with specific educational goals and serving classes or communities. They were held in high regard by the British colonial rulers, with limited interconnections or relationships among them. Each of these institutions played a vital role in shaping the educational landscape of pre-colonial India.

The Pathshalas in Bengal played a crucial role in providing basic skills and education for the general population in their daily lives. These educational institutions were organized and operated by teachers, and their financial support often came from patrons, typically belonging to the lower social

¹⁰IOR, F/4/1846, no. 776, Minute of T. B. Macaulay, (2 February 1835).

¹¹IOR, F/4/1846, no. 776, Minute of T. B. Macaulay, (2 February 1835).

classes within the existing hierarchy of society. The students and teachers of the Pathshalas included individuals from various social groups. Brahmins and Kayasthas, who were upper-caste groups, were involved with the pathshala education system. In contrast, non-Brahmins, who lacked formal alternatives for education, also had a stake in the pathshala structure. The pathshala system had a substantial mass base, but it operated within the pervasive influence of Brahmanical norms and values. The system aimed to prepare its students to fulfil their respective caste duties and responsibilities as outlined in the smriti texts. In this way, the pathshala system contributed to achieving its societal objectives. One distinctive feature of the pathshala system was its decentralized nature. It lacked a centralized administrative structure, and there was no direct state control over the system. Instead, it focused on meeting the practical needs of daily life effectively. The lower-caste students received vocational training related to tasks such as accounting and maintaining land and property records. Brahmins, on the other hand, acquired basic literacy and numeracy skills through Sanskrit learning, which also prepared them for roles as teachers and religious preachers. Overall, the pathshala system in Bengal was a significant and flexible educational system that catered to diverse educational needs and backgrounds, contributing to the socio-educational landscape of the region.

In both Hindu and Muslim educational institutions of the time, it was not uncommon to find a few teachers who not only provided education for free but also offered their students food and accommodation. However, most of the classes took place in nearby temples or mosques, and occasionally in the homes of local patrons or influential individuals, as well as within the teacher's residence. It's worth noting that the state did not play a role in the regular operations of these schools, and the educational institutions were largely self-sustained within their local communities. An interesting aspect was that Hindu Persian teachers were sometimes found teaching in Persian-Arabic schools, even though most of these teachers were Muslims. This reflected the significance of Persian as the court language during the Mughal rule, leading many Hindus to attend Persian schools run by Muslim educators. While most students in these institutions came from higher social classes, there was a small number of girls and children from various communities who also attended. Students had the flexibility to enroll at any time, join classes, set their own pace for learning, and leave the institution after completing the available curriculum. The fee structure was determined by the financial capacity of the students' parents, and even the timing and method of payment were left to the discretion of the parents. One remarkable characteristic of the indigenous primary school system was its adaptability to local environments. Over centuries, it had developed a strong reputation and thrived in various financial circumstances, making it an integral part of the educational landscape during that period.

Pathshalas and tols, as indigenous educational institutions, were characterized by their selfreliance and local focus. They operated with limited or no involvement from the state or other government authorities in terms of funding or governance. Instead, these organizations relied on community support and patronage. The financing of these institutions followed an informal and community-based model. They received contributions and donations from residents, concerned parents, and individuals who wanted to support education. This support included financial contributions as well as providing a physical location for the school to conduct its activities. One of the distinguishing features of these institutions was the close and personal relationship between teachers and students. Teachers often had other occupations to support both their families and the needs of the school. Because of their financial independence from the government, these schools could operate autonomously, allowing teachers to determine the curriculum and teaching methods according to the students' demands and needs. Many of these schools in Bengal held their classes at places like the Chandimandap, which belonged to prominent local families and were also used for religious ceremonies and worship. Classes were held outdoors during the dry season and indoors during the wet season. This practice not only accommodated the weather but also helped students gain a deeper understanding of their environment and the natural cycles, enriching their knowledge of the world and their surroundings. The pre-colonial schooling system in India ensured a strong connection between students, their environment, and their culture. Students were regarded as part of the teacher's extended family, fostering informal relationships and a sense of community within these educational institutions.

The pre-colonial education system in India had a strong focus on equipping students with practical skills and vocational training that would allow them to earn a livelihood through their labour. Students were expected to be able to pay for their education through their work while also developing into well-rounded individuals through the vocational skills they acquired in school. Before the British colonial period, maktabs (schools) were known for providing vocational training in areas such as letter writing and accounting. During the Mughal era, many individuals from communities like Kayasthas and Khatris started enrolling in Persian and accounting classes at local maktabs. These vocational skills were in high demand, as they were essential for tasks like tracking payments, conducting account audits, and determining rent prices, which were crucial in the functioning of the Mughal administration. In the Mughal era, many of the Muslim serving classes were more reliant on patronage and were less likely to specialize in accountancy, despite its importance in the administration. However, as the Mughal empire began to decline and successor states like Maratha, Bengal, and Awadh emerged, the demand for accountants increased. These states needed accountants to manage rising assessment rates, expanding cultivation, maintaining a sizable army, and managing state revenue. Since maktabs had been established before British rule and the political turmoil of the 18th century, individuals from communities like Kayasthas and Khatris had an advantage due to the vocational skills they had acquired.

The indigenous education system also emphasized the teaching of fundamental skills often referred to as the "three Rs" of education: reading, writing, and basic arithmetic. Additionally, Mahatma Gandhi emphasized the development of the "3Hs," which stood for Hand, Head, and Heart, signifying the importance of practical skills, intellectual development, and moral and emotional growth in education. According to William Adams, the indigenous education system was costeffective and effective in shaping individuals' character and expanding their intellectual horizons. The system was tailored to meet the needs of the indigenous population, and it covered various subjects, including religious and philosophical literature, astronomy, medicine, drama, law, poetry, and logic. Students were also instilled with a strong moral and ethical foundation through teachings from texts like the Ramayana, Mansa-Mangal, and Vedas. Adam's survey of elementary education divided it into four stages: the first level involved teaching young children to create the alphabet on the ground or a sandboard, which typically lasted around ten days. The second stage, lasting between 30 and 48 months, focused on teaching children how to read and write. The third stage, spanning 2-3 years, involved writing on plantain leaves. The fourth and final stage, which could last up to 24 months, aimed to make learners proficient in accounts, letter writing, and recitation of religious and spiritual texts like the Ramavana.

The indigenous system of education in India faced severe challenges and was marginalized during the British colonial rule. The colonial administration often depicted it as inferior, inadequate, and rudimentary to justify the imposition of the Western model of education. This was part of a broader strategy to exert control over the minds of the native population and promote Western knowledge as the sole legitimate form of education. However, it's essential to recognize that the indigenous system of education in India was not static but an evolving one that adapted to serve the changing needs of its time. While it prioritized spiritual and mental well-being, it also responded to practical requirements. This system influenced thinkers like Mahatma Gandhi and his concept of Nai Talim, which emphasized holistic education that combines intellectual and vocational training with a focus on character development.

The National Education Policy (NEP) of 2020 has drawn upon essential principles and insights from India's indigenous education system to shape a modern, adaptable framework. These influences are evident in several key aspects of the NEP:

- Firstly, the indigenous system emphasized vocational skills and practical education, a
 focus that the NEP has retained by recognizing the importance of vocational training
 within the curriculum. It aims to nurture practical skills alongside traditional academic
 subjects.
- 2. Secondly, multilingualism was a hallmark of the indigenous system, and the NEP places a strong emphasis on this as well. The policy encourages students to learn three languages, recognizing the linguistic diversity in India, and promotes the study of classical Indian languages to preserve cultural and linguistic heritage.

- 3. Moreover, the indigenous schools were locally managed and independent, allowing them to cater to the specific needs of their communities. The NEP seeks to empower educational institutions with more autonomy, enabling them to make decisions that best serve their local contexts and encouraging innovation.
- 4. Finally, the NEP introduces flexibility in the education system by providing students with multiple entry and exit points. This approach acknowledges the diverse talents and aspirations of individuals and allows them to tailor their educational journeys according to their unique paths.

Incorporating these lessons from the indigenous system, the NEP aspires to create a contemporary and inclusive education system that better aligns with the diverse needs of India's population. It aims to provide a well-rounded, practical education that prepares students for a rapidly changing world while respecting the rich cultural and educational heritage of the country.

Future and Challenges

The National Education Policy of 2020 is guided by the principle of "No Child Left Behind," aligning with the universal elementary education mandate of the Right to Education Act. Despite over 75 years of independence, India has yet to fully attain Universal Elementary Education, highlighting the shortcomings of previous education policies. The NEP aims to rectify this and meet the Sustainable Development Goal 4, which focuses on ensuring equitable, high-quality education and promoting lifelong learning. Recognizing the evolving nature of Universal Elementary Education in the 21st century, the NEP places a strong emphasis on equipping students with the skills needed to confront the challenges of this era. It seeks to provide a comprehensive and adaptable education that prepares students for the changing demands of the modern world.

We stand on the cusp of a transformative Industrial Revolution driven by technological advancements such as big data, Artificial Intelligence (AI), the Internet of Things (IoTs), and Machine Learning (ML). This revolution is poised to reshape how we interact, live, and work in unprecedented ways. The magnitude, scope, and complexity of this shift are unparalleled in human history. While the exact trajectory of this revolution remains uncertain, collaboration among all stakeholders is imperative to develop a comprehensive and integrated response. The advent of this revolution, with its unparalleled computing power, storage capabilities, and global connectivity through smartphones and smart devices, unlocks boundless possibilities. These opportunities will continue to expand as new technologies emerge in areas like robotics, IoTs, autonomous vehicles, Nano and biotechnology, and quantum computing. Realizing Universal Elementary Education (UEE) also entails equipping students with an awareness of technological transformations and providing them with the skills necessary for the 21st century. The 20th-century labour landscape, reliant on physical labour, will undergo profound changes as industries mechanize and AI becomes increasingly prevalent. The NEP emphasizes the importance of imparting vocational skills to students and adapting the education policy to accommodate these changes. This approach ensures that the workforce is well-prepared for the evolving nature of employment, aligning education with the demands of the future.

The need to modernize our education system is paramount, equipping students with the skills necessary to compete with smart machines while simultaneously fostering human and economic assets for the future. Previous education policies in India have perpetuated a 'colonial legacy,' emphasizing memorization and standardization to meet the demands of 20th-century industries. However, the relentless ascent of machines and computer-based knowledge is ushering in an era where automation threatens to replace human workers. This transition is already underway, exemplified by the rapid mechanization of the automobile industry. To thrive in this changing landscape, the future generation must unlock its full potential, striking a harmonious balance between intellectual prowess, emotional intelligence, and resilience. The National Education Policy (NEP) recognizes the need for critical thinking while also placing significant emphasis on instilling ethical and moral values in students. By integrating ethical, moral, and spiritual education with academic learning, the NEP prepares students to confront the challenges of the future, ensuring their financial and emotional well-being. This holistic approach equips students to adapt, succeed, and contribute to an evolving world driven by technology and automation.

Furthermore, the multidisciplinary approach advocated by the National Education Policy (NEP) offers educational institutions the flexibility to tailor their curricula to the specific needs of

students. This approach enables students to not only grasp new concepts but also to compare these ideas with existing ones, ultimately leading to the generation of innovative conclusions and the creation of new ideas. The fostering of novel ideas is a catalyst for increased entrepreneurial opportunities, which, in turn, drive employment creation and fuel the 21st-century economy. An exemplary illustration of this multidisciplinary approach is the Cluster Innovation Centre (CIC) at Delhi University, established during the tenure of Prof. Dinesh Singh as Vice-Chancellor. CIC stands as one of the country's pioneering institutions that has successfully implemented a multidisciplinary approach to higher education. From its inception, students at CIC have engaged in various projects and studies, resulting in the development of start-ups based on their innovative ideas. The NEP actively promotes and encourages a similar culture across India's educational landscape, fostering the emergence of institutions that provide students with the skills, knowledge, and mindset necessary to contribute to the nation's entrepreneurial and economic growth. The University of Jammu has introduced an innovative four-year undergraduate program known as 'design your degree,' commencing in the current academic session. This program is poised to bring a significant transformation to higher education, offering students an entirely new approach to pursue their academic goals. Under the 'design your degree' program, students will have the unique opportunity to customize their educational experience by selecting courses from a wide range of academic disciplines. This approach will provide students with a well-rounded education that fosters critical thinking, creativity, and adaptability – essential qualities for success in our rapidly evolving global landscape. The primary goal of this degree program is to produce graduates who are not only experts in their chosen fields but who also possess a comprehensive understanding of the world. This holistic education will empower them to make meaningful and impactful contributions to society, addressing the multifaceted challenges and opportunities of the modern world.

The National Education Policy (NEP) represents a significant departure in India's education policy, drawing inspiration from indigenous educational traditions while adapting them to meet the needs of the modern world. However, despite its promising vision, NEP faces significant challenges in its implementation. One of the foremost challenges relates to language instruction. While NEP promotes mother tongue instruction and advocates for the three-language formula in schools, India struggles with an imbalanced teacher-to-student ratio. Implementing the language aspects of the policy necessitates a substantial number of well-qualified teachers who possess a deep understanding of the languages they teach, including their nuances. Ensuring a sufficient supply of high-quality teachers can be a formidable task. Furthermore, producing quality study materials in mother tongues presents another hurdle, as it requires a concerted effort to create educational resources in various languages. Additionally, NEP encourages the teaching of classical and indigenous languages to preserve India's rich linguistic heritage and enrich students' knowledge. However, the prescribed minimum two-year teaching period for such languages may be insufficient for students to truly grasp the essence of these languages. The roots of the three-language formula date back to 1956 when it was first proposed, and it has gone through various iterations, with varying levels of success. To effectively implement this policy, it is essential to ignite students' curiosity and interest in these languages, enabling them to appreciate the languages' richness and cultural significance. In summary, while NEP presents a visionary approach to education, its successful implementation requires overcoming challenges related to teacher availability, study materials, and generating student interest in languages, particularly indigenous and classical ones. Addressing these challenges will be crucial to realizing NEP's objectives.

The National Education Policy (NEP) seeks to equip children for the future by emphasizing the importance of computer knowledge, the ability to analyze big data, and awareness of technologies like AI, ML, and IoT. However, implementing these aspects of the policy poses significant infrastructural challenges for schools in India. Many schools in the country lack the necessary digital infrastructure to support digital education. This deficiency is not limited to public schools; even private institutions need to improve their digital capabilities to fulfil NEP's aspirations. In some states, such as Bihar, schools lack not only digital infrastructure but also basic facilities like sanitation. Creating a digital infrastructure across the nation is a monumental task that requires substantial resources. While NEP discusses increasing education expenditure to 6% of the GDP, it does not provide specific measures for addressing the disparities between states. To bridge this gap, special

packages may be necessary for economically challenged states like Bihar and Madhya Pradesh to enhance their school infrastructure and provide the required digital hardware and skilled manpower. The COVID-19 pandemic highlighted a growing digital divide in the country. Many students lacked the means to attend virtual classes, exacerbating educational inequalities. Given that a blended mode of education is becoming a reality, addressing the digital divide is crucial to prevent it from widening. Ensuring equal access to digital resources and technology is vital to preparing India's students for the challenges of the future as envisioned by NEP.

India faces a set of both contemporary and traditional challenges that hinder its progress towards achieving Universal Elementary Education (UEE). While contemporary challenges are related to infrastructural and technological shortcomings, traditional issues such as gender bias and poverty remain significant barriers. Among the traditional problems, poverty stands out as a major impediment to UEE. It often creates a cyclical relationship where individuals remain uneducated due to poverty, and, in turn, poverty persists because of illiteracy. This situation is exacerbated in a country with a large population and a high fertility rate. Research from 2009 suggests that adding one person to a household increases the likelihood of experiencing moderate or severe poverty by 5.16% and 3.13%, respectively. With larger families, it becomes increasingly difficult to make decisions regarding education. Families often face a dilemma: whether to send their children to school and risk going hungry or use their additional labour to earn more income to feed the family. The indirect costs associated with schooling, such as lost potential earnings, are one of the reasons children do not attend school, perpetuating the cycle of poverty and illiteracy. These traditional challenges pose significant obstacles to achieving UEE in India.

One of the significant contemporary challenges that the National Education Policy (NEP) 2020 may face is the impact of climate change on various aspects of education. Climate change has the potential to significantly affect the quality of education, school days, and infrastructure, among other areas. A UNICEF report from 2015 highlighted the adverse effects of climate change on vulnerable students, which can exacerbate existing disparities and reverse the progress made in education over the previous decades. The impact of climate change is likely to be felt most strongly by already disadvantaged groups, further amplifying inequalities in education. Vulnerable populations, such as children living in poverty in rural and urban areas, students with learning difficulties, and children from minority and immigrant groups, are particularly at risk in the face of climate change. Additionally, poor states are expected to bear the brunt of climate change consequences. For instance, Bihar, a state in India, is particularly susceptible to floods, both natural and man-made, due to its geography and hydrology. There is compelling evidence that climate change has altered the frequency, predictability, and severity of natural disasters, leading to an increased likelihood that minor disasters may escalate into major humanitarian crises. Children, due to their vulnerability, are especially susceptible to the harmful effects of disasters. For instance, the melting of glaciers can lead to more frequent and severe floods, which can damage school infrastructure and disrupt students' access to education during critical developmental years. Addressing the educational challenges posed by climate change will be a crucial aspect of ensuring the success of the NEP 2020, especially in regions most affected by environmental changes.

The National Education Policy (NEP) 2020 is a visionary document poised to reshape India's educational landscape and position the nation as a leader in the technology-driven 21st century. As India approaches its 100th year of Independence in 2047, the NEP, if fully realized, holds the potential to propel India to the forefront of technology-led growth. This transformative vision seeks to nurture critical thinking skills among the populace and prepare individuals for a purposeful life in a rapidly evolving world. However, a series of challenges must be confronted to translate these aspirations into reality. These include addressing the digital and income disparities that persist within the nation, as access to digital infrastructure and resources remains uneven across regions. Breaking the cycle of poverty is another pivotal task, as it continues to impede educational access and progress. Moreover, the impact of climate change on education, especially in vulnerable regions, cannot be overlooked. The integrity of schools and educational infrastructure is at risk due to changing weather patterns and natural disasters, which can disrupt students' learning opportunities. The competence of educators is another essential aspect; equipping teachers with the skills and training to effectively implement the NEP curriculum is vital. Finally, the successful execution of the NEP hinges on

cooperative efforts between the central and state governments, as education is a subject on the concurrent list in the Indian Constitution. Acknowledging the differing financial capacities of states, the Centre's support is imperative for ensuring equitable and effective NEP implementation across the nation. The NEP 2020 holds immense potential for India's educational transformation, but it requires concerted action and collaboration among all stakeholders, including governments, educators, and civil society. Overcoming these challenges can position India to revolutionize its education system and prepare the nation for a future marked by innovation, critical thinking, and technological advancements.

References

- 1. Acharya, Poromesh. "Indigenous Education and Brahminical Hegemony in Bengal." in *The Transmission of Knowledge in South Asia: Essays on Education, Religion, History, and Politics*, edited by NigelCrook, Delhi: Oxford University Press, 1996.
- 2. Adam, William. Third Report on the State of Education in Bengal, Including Some Accounts of the State of Education in Bihar. Calcutta, 1838.
- 3. ASER Report 2021.
- 4. Bertho, A, and et al. *Impact of Disasters on Children: A Case Study of Five Disaster-Prone Districts in Uttar Pradesh and Bihar, India*. Knowledge Community on Children in India, KCCI/2012-03. New Delhi: UNICEF, 2012.
- 5. Dharampal. *The Beautiful Tree: Indigenous Indian Education in the Eighteenth Century*. New Delhi: Other India Press, 1983.
- 6. Dibona, Joseph. One Teacher, One School: The Adam's Report on Indigenous Education in Nineteenth Century India. New Delhi, Biblia Impex, 1982.
- 7. https://www.unicef.org/eap/media/4596/file/It%20is%20getting%20hot:%20Call%20for%20education%20systems%20to%20respond%20to%20the%20climate%20crisis.pdf
- 8. https://www.weforum.org/focus/fourth-industrial-revolution
- 9. Jensen, Peter, and Helena Skyt Nielsen. "Child Labour or School Attendance? Evidence from Zambia." *Journal of Population Economics* 10, no. 4 (1997), pp. 407–24.
- 10. Kincheloe, J. "Critical ontology and indigenous ways of being: Forging a Post-colonial Curriculum." in *Curriculum as Cultural Practice*, edited by Yatta Kanu, Toronto: University of Toronto Press, 2006.
- 11. Macaulay's Minute on Education, February 2, 1835.
- 12. Mukhopadhyaya, A. *Reform & Regeneration in Bengal, 1774–1823.* Calcutta: Rabindra Bharti University, 1968.
- 13. National Education Policy, 2020.
- 14. Nurullah, S, and J.P. Naik. A History of Education in India. Bombay: Macmillan, 1951.
- 15. Radhakrishnan, P. "Indigenous Education in British India: A Profile." *Contributions to Indian Sociology*, 24:1, (1990).
- 16. Suman, Amit K. "Colonial Policies and Centres of Indigenous Learning in Early Modern India." *Nehru Memorial Museum and Library Occasional Paper History and Society*, New Series 87, 2017.
- 17. Suman, Amit K. "Indigenous Educational Institutions in Upper Gangetic Valley: Curriculum, Structure and Patronage." *Social Scientist* 42, no. 3/4 (2014): 45–57.
- 18. Viswanathan, Gauri. *Masks of conquest: literary study and British rule in India*, London: Faber, 1990.
- 19. "Why Three Languages?" Economic and Political Weekly, vol. 2, no. 14, 1967, p. 663.