

INNOVATIVE INFORMATION AND NEW EDUCATION POLICY IMPORTANT FOR THE DEVELOPMENT OF MODERN SCIENCE

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ABSTRACT

Indigenous science plays a crucial role in the development of science and technology. It provides rich contexts for understanding the relationship between sociocultural life and environmental ethics, leading to better reflection on western modern views of science. 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. This research paper endeavours to demonstrate the NEP's dedication to reviving indigenous wisdom and incorporating it into the modern educational framework. 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. Knowledge of India that covers various domains such as science and technology, literature, philosophy, culture, medicine (ayurveda), and yoga. NEP has focused on interdisciplinary and transdisciplinary knowledge, and it can integrate the contemporary knowledge vested with IKS to address current and future challenges.

Keywords: Indigenous knowledge 2020; Informal education, Western Education. Multiculturalism.

Introduction

In simple words, Traditional Knowledge means the experience that has been transferred from one generation to the next generation. At the same time, indigenous knowledge is related to a particular geographical area or a specific culture. Our ancestors had evolved unique ways of sustainable living in coherence with the environment. This knowledge always had the importance to deal with the natural surroundings, not only in the past thousands of years ago, but it would have the same value even thousands of years later. This delicate balance that our ancestors had maintained to live sustainably needs proper protection and preservation. Here, while emphasizing preservation, we not just meant to keep those pieces of knowledge alive in books or museums, but rather forwarding them to future

generations while enabling them to recognize its hue worth. For such preservation, there is a need for a collaborated and concentrated effort at the global level. 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.

Why is the route of the education system so essential for protecting and preserving

Traditional Knowledge? This query hits the human inquisitiveness at first stance. To answer the same, it is a well-established notion that education plays an essential part in forming one's reasoning and ability to achieve the targeted goal. It also enables individuals to distinguish between right and wrong. Education doesn't only mean to learn, but it also implies helping others learning to do things and encouraging them to understand what they gained and where they can implement their learning. In short, education provides society with a chance to make progress while fully attached to their roots. Knowledge can make the adult generation able to learn and understand traditional ways of practicing particular art, craft, scientific and technical activities.

UNDERSTANDING OF TRADITIONAL INDIAN KNOWLEDGE SYSTEMS

The integration of Traditional Indian Knowledge Systems (IKS) into the educational landscape not only serves as a means of cultural preservation but also holds the potential to redefine the learning paradigm in India. By incorporating IKS into the mainstream curriculum, educators are presented with a unique opportunity to cultivate a more profound understanding of India's heritage among students. This shift in educational focus aims to instill not only academic knowledge but also a sense of cultural pride and identity, fostering a generation that is deeply connected to its roots. Furthermore, the infusion of IKS into the education system promotes a holistic approach

to learning, transcending the conventional boundaries of academic disciplines. This interdisciplinary integration allows students to explore the intersections between traditional knowledge and contemporary subjects such as science, arts, and humanities. The synthesis of diverse knowledge fields not only enriches the learning experience but also equips students with a well-rounded perspective that is essential for addressing complex challenges in today's world. In the realm of sustainable development, the emphasis on traditional ecological practices embedded in IKS becomes particularly significant. By encouraging environmentally friendly and resource-efficient approaches, the education system contributes to the cultivation of a sustainable mindset among students. This, in turn, positions the younger generation as stewards of the environment, capable of adopting practices that contribute to the long-term well-being of both society and the planet.

CHALLENGES OF IMPLEMENTATION

There are certain challenges when it comes to integrating IKS with NEP. There is a lack of awareness among the community and stakeholders about the importance of IKS. IKS is generally present in non-literary form and it has been passed orally from one generation to another ("Indian Knowledge Systems (IKS): Challenges of implementing it in", n.d.). It makes it difficult to develop and implement IKS-based courses and programs in educational institutions. There is no clear-cut curriculum about IKS and it is leaving educationists perplexed ("Autonomous colleges in state face challenges in implementing", n.d.). Many stakeholders may see it as irrelevant or

outdated. As IKS is available in different languages it may create barriers to those who are not well-versed with these languages. Moreover, the colonial system of education has created a bias against the IKS in the Indian Education system. The Indian education system is largely focused on the Western knowledge system and it can create difficulty in accommodating this system. There is also a shortage of well-qualified teachers to teach the IKS because it is not widely adopted yet. By incorporating indigenous science into education, students can gain a deeper understanding of scientific concepts and recognize the value of promoting sustainability, contributing to education for sustainable development.

CONCLUSION

The inclusion of IKS in India may help the stakeholders to know their cultural heritage and they may develop a deep understanding of the environment. As IKS is based on tacit knowledge it can help students to face and tackle the challenges they are going to face in their real life such as challenges of climate change and food security. But this inclusion of IKS has certain challenges and these challenges need to be addressed before inclusion. The Indian government has taken a step under NEP to integrate IKS into the curriculum. There is an emergent need for proper training of the teachers so that they have proper knowledge of IKS and can deliver it in a meaningful way. The data available about IKS needs to be streamlined with the help of information technology and making it available as per the needs and capacity of the stakeholders. This

cannot be done overnight as the Indigenous Knowledge Systems have evolved in India over thousands of years. It will be replaced gradually over time. Indigenous knowledge has potential to provide learners with a broader view of the world and to understand scientific knowledge by more holistic learning which might make learners able to understand better the role of any social and cultural context in the generation of scientific knowledge.

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