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Capitalistic curricula and pedagogies: A comparative study of Indian knowledge systems in English textbooks of Central Board and Rajasthan Board Schools

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curriculum reform;
english textbooks;
Indian knowledge system;
NEP 2020;
RBSE;
sustainable education.

Abstract

English serves as a pivotal subject in Indian school curricula, offering students a platform to connect with diverse global and cultural perspectives. The National Education Policy (NEP) 2020 emphasizes revitalizing India's rich cultural heritage by integrating the Indian Knowledge System (IKS) into education. This study employs the Content Analysis method to critically examine the representation of IKS in English textbooks prescribed by the Central Board of Secondary Education (CBSE) and the Rajasthan Board of Secondary Education (RBSE).

The findings reveal significant discrepancies in the extent and depth of IKS incorporation between the two boards, with CBSE textbooks demonstrating limited engagement compared to the more localized emphasis in RBSE curricula. These inconsistencies underscore the challenges of decolonizing education and the persistent dominance of capitalistic pedagogies that prioritize market-driven objectives over cultural and ecological sustainability.

The study advocates for the effective implementation of NEP 2020 recommendations through green curricular reforms that prioritize IKS integration, social justice, and sustainability. By aligning education with holistic and equitable frameworks, these reforms can empower students as agents of cultural preservation and ecological stewardship, fostering a globally connected yet culturally rooted education system.

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Introduction

Role of higher education in driving transformation

Higher education institutions play a pivotal role in addressing societal challenges and fostering innovation. They serve as incubators for new ideas, frameworks, and practices, equipping future leaders with the skills and values necessary to contribute to sustainable development and societal growth. This transformative potential of higher education can be analyzed through several dimensions.

Higher education institutions are at the forefront of adopting and implementing policies like the National Education Policy 2020 (NEP 2020). NEP 2020 emphasizes a multidisciplinary approach, integrating Indian Knowledge Systems (IKS) and promoting sustainability and equity in education (Government of India, 2020). For instance, the introduction of eco-centric courses and curricula fosters an understanding of environmental conservation among students (Sharma & Singh, 2021). Such efforts align with the global agenda of Sustainable Development Goals (SDGs), particularly SDG 4, which advocates for inclusive and equitable quality education. It also includes the importance of AI in education. There are articles which stress the urgency for universities to integrate AI literacy within their curricula, not just as a technical subject, but intertwined with ethical decision-making and critical analysis.

Universities act as hubs of research that address pressing global issues, including climate change, cultural preservation, and technological advancement. According to Kumar (2019), higher education institutions have a responsibility to strengthen cultural identity by integrating indigenous literature and knowledge systems into their research and teaching practices. These research efforts not only preserve cultural heritage but also generate innovative solutions to contemporary challenges, creating a bridge between tradition and modernity.

Higher education cultivates leadership by embedding values of social responsibility and eco-consciousness into its programs. Initiatives like green campuses, as seen in universities in Bhutan (Dema, 2017), serve as examples of how institutions can lead by example. By integrating principles of Gross National Happiness into their pedagogy, these universities demonstrate the potential for education systems to balance economic, environmental, and social well-being.

Despite these opportunities, higher education in India faces structural challenges, such as inadequate funding, limited faculty training, and infrastructural deficits. Raina and Dey (2020) highlight the need for capacity-building programs for educators to facilitate the integration of indigenous knowledge and sustainability concepts into the curriculum. Moreover, the digital divide continues to hinder equitable access to quality education, particularly in rural areas (Mishra, 2020).

To maximize the potential of higher education in driving transformation, several measures can be undertaken:

- Enhancing faculty training programs to equip educators with the skills required to teach interdisciplinary and eco-centric courses (Batra, 2021).
- Strengthening public-private partnerships to address infrastructural and financial constraints (Giroux, 2004).
- Promoting international collaboration and knowledge-sharing initiatives to incorporate global best practices into local contexts (Norberg-Hodge, 1991).

Higher education institutions thus serve as critical agents of change, bridging policy aspirations with societal realities, but as Martin (2023) highlights, academics need to exercise the critical thinking they sell to their learners a little more deeply themselves. Through curricular reforms, research initiatives, and the cultivation of leadership, they have the potential to address global challenges while preserving cultural and environmental integrity.

Education is a transformative force that shapes societal values, beliefs, and the intellectual frameworks of future generations. In India, the National Education Policy (NEP) 2020 emphasizes revitalizing the country's cultural heritage by embedding the Indian Knowledge System (IKS) into mainstream education. This transformative vision aims to ensure that education does not merely serve as a vehicle for economic advancement but also as a medium to preserve and propagate India's rich cultural, ecological, and philosophical traditions. A key element in this process is the role of English as a compulsory subject in school curricula, particularly in systems governed by the Central Board of Secondary Education (CBSE) and state boards like the Rajasthan Board. English textbooks serve as a gateway for students to access global knowledge systems while simultaneously offering opportunities to reflect on and integrate indigenous traditions. However, the degree to which these textbooks succeed in incorporating IKS remains a critical area of investigation.

This research critically examines the integration of Indian Knowledge Systems within English textbooks used by CBSE and Rajasthan Board schools. By employing the Content Analysis method, this study focuses on the thematic representations, narratives, and pedagogical elements within these textbooks to assess their alignment with the NEP 2020's vision. The primary objectives are to identify discrepancies, highlight areas of omission, and understand how well these textbooks reflect the ethos of India's indigenous knowledge systems.

The historical context of this research is deeply rooted in the colonial legacy of education in India. Colonial powers systematically marginalized indigenous knowledge systems, replacing them with Euro-centric paradigms that prioritized capitalistic and industrial values over ecological sustainability and cultural inclusivity. This legacy has left an indelible mark on India's education system, creating a persistent imbalance where global knowledge dominates at the expense of indigenous traditions. While the NEP 2020 represents a

significant policy shift by advocating decolonized curricula, the challenge lies in translating this vision into practice, particularly within educational content such as textbooks.

The present study is timely, as it interrogates the practical implementation of the NEP 2020 recommendations. By comparing the representation of IKS in English textbooks from CBSE and Rajasthan Board schools, this research reveals the gaps and opportunities in curricular content. The findings are expected to shed light on how education systems in India can move beyond superficial inclusion to foster deeper integration of cultural, ecological, and philosophical elements of IKS.

This inquiry is not merely theoretical; it aligns with broader global efforts to create sustainable and equitable education systems. Examples like Bhutan's Green School System (Wangchuk, 2017), the Students' Educational and Cultural Movement of Ladakh (SECMOL), and Rajasthan's Barefoot College underscore how education can be re-imagined prioritizing social justice, sustainability, and cultural inclusivity. These models serve as benchmarks, offering valuable insights into how indigenous knowledge can be effectively embedded into educational practices.

Through this analysis, the study aims to make a meaningful contribution to the discourse on decolonizing education. It underscores the importance of challenging capitalistic and Euro-centric paradigms while advocating for education that is rooted in cultural heritage and ecological consciousness. By examining the potential of English textbooks to act as conduits for IKS, this research contributes to the larger vision of reimagining education as a tool for both cultural preservation and progressive global engagement.

Intent

The study seeks to explore the integration of the Indian Knowledge System (IKS) within the English textbooks of the Central Board of Secondary Education (CBSE) and the Rajasthan Board of Secondary Education (RBSE). It aims to critically evaluate how these curricula align with the National Education Policy (NEP) 2020's vision of fostering cultural preservation, eco-centric values, and holistic education. By analyzing the representation of IKS in these textbooks, the research intends to identify the strengths, gaps, and inconsistencies in their content, thereby offering actionable recommendations for curriculum development that effectively bridges global learning standards with indigenous knowledge.

Rationale

The National Education Policy 2020 emphasizes the importance of integrating IKS into the education system to cultivate a generation of learners who are deeply connected to their cultural roots and committed to sustainable development. English, as a subject, serves as both a vehicle for global engagement and a platform for promoting local identities and traditions. This dual role makes English textbooks a critical focus area for examining how curricula

reflect and uphold India's rich cultural and ecological heritage.

Despite this, there is a noticeable gap in research that systematically evaluates the extent and depth of IKS integration in English textbooks, especially across different educational boards in India. The CBSE and RBSE, representing national and regional frameworks, provide a valuable comparative lens for understanding how cultural diversity and ecological consciousness are embedded in educational materials. This study addresses this gap by providing a nuanced analysis of the content, with the goal of aligning textbook design more closely with the NEP's holistic vision.

Methodology

This study employs a qualitative content analysis methodology to examine the representation of cultural heritage, indigenous traditions, and eco-centric values in English textbooks from CBSE and RBSE for grades 9–12, a critical stage in secondary education. The analysis involves systematically reviewing these textbooks through a coding framework designed to classify content into predefined categories, including cultural narratives, ecological themes, and indigenous knowledge. A comparative analysis evaluates the thematic alignment of the content with the objectives of the National Education Policy (NEP) 2020, focusing on the depth, breadth, and contextual relevance of IKS representation across the two boards. Critical interpretations drawn from the data identify disparities, strengths, and areas for improvement in the integration of IKS. Based on these findings, the study offers practical recommendations for enhancing English curricula, drawing insights from global pedagogical models and the eco-centric principles advocated by NEP 2020.

Education is the cornerstone of societal development, shaping the values, beliefs, and knowledge systems that influence future generations. In India, the National Education Policy (NEP) 2020 has emphasized the importance of revitalizing India's rich cultural heritage through education, particularly by promoting the Indian Knowledge System (IKS) within various educational contexts. English, as a compulsory subject in school curricula governed by both the Central Board of Secondary Education (CBSE) and state boards like the Rajasthan Board, plays a critical role in broadening students' worldviews. It offers students the opportunity to connect with diverse cultures, traditions, and histories, both within India and globally. However, the extent to which English textbooks incorporate indigenous knowledge systems remains a significant area of investigation.

The study aims to explore the presence of Indian knowledge within English textbooks used in schools following the curricula of both the Central Board and the Rajasthan Board. By employing the Content Analysis method, this research examines how these textbooks reflect or neglect IKS, thereby assessing the potential role of indigenous knowledge in revitalizing the Indian education system, in alignment with the recommendations outlined in NEP 2020.

The historical imposition of Western education systems during the colonial era led to the marginalization of indigenous knowledge systems. European colonizers, despite their efforts to dismantle the eco-centric knowledge systems of indigenous communities, could not completely suppress these communities' epistemological and ontological foundations. Instead, these colonial powers transformed their insecurities into a global phenomenon, resulting in invisible empires of capitalism that continue to dominate educational practices today. These practices often prioritize profit and exclusivity at the expense of ecological sustainability and social justice (Bowers, 2001; Shiva, 1988).

The NEP 2020 represents a significant shift toward challenging these capitalistic frameworks by advocating for the integration of IKS into the mainstream education system (Government of India, 2020). However, the mere inclusion of indigenous knowledge in educational curricula is insufficient. As this content analysis of English textbooks reveals, there are notable discrepancies in the incorporation of IKS between the Central Board and Rajasthan Board curricula. These discrepancies underscore the persistent challenges of decolonizing education and the need for a more concerted effort to dismantle capitalistic curriculums and pedagogies that continue to dominate (Raina, 2019).

Alternative educational models offer valuable insights into how education can be reimagined to foster ecological sustainability and social equity. For instance, the Green School System in Bhutan, the SECMOL (Students' Educational and Cultural Movement of Ladakh) project, and the Barefoot College in Rajasthan serve as exemplary models of how education can prioritize sustainability, social justice, and holistic learning (Norberg-Hodge, 1991; Shiva, 2005). These models, though rooted in specific socio-cultural contexts, provide critical lessons for creating a more equitable and sustainable education system in India.

The effective implementation of NEP 2020's recommendations in future curricula has the potential to preserve and promote India's rich cultural and traditional values while contributing to the global movement toward decolonizing education (Kumar, 2021). By adopting green curricular and pedagogical approaches, educators can create learning environments that empower students to become active agents of positive change in their communities and the world. In this context, the comparative study of English textbooks used in CBSE and Rajasthan Board schools provides a critical lens to examine ongoing efforts to integrate IKS into the Indian education system and the broader implications for educational reform in the post-colonial, post-capitalistic era.

Literature review

The pie chart representing the distribution of the key themes in the literature review on the integration of the Indian Knowledge System (IKS) in the English curricula of CBSE and RBSE. The chart highlights various aspects, including the incorporation of IKS in educational policies, comparative studies on CBSE and RBSE curricula, analysis of NEP 2020 and IKS, global perspectives on alternative pedagogical models, and the challenges in implementing IKS in the

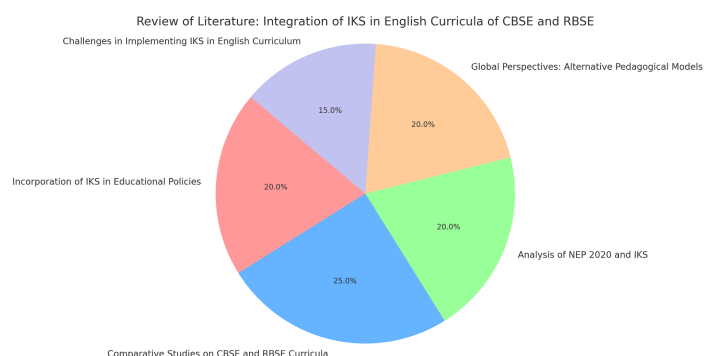


Figure 1. Review of literature.

English curriculum.

The integration of indigenous knowledge systems (IKS) into modern educational curricula has gained increasing attention, particularly in post-colonial societies like India. This literature review provides a comprehensive exploration of the historical marginalization of IKS, the influence of capitalism on education, and the transformative potential of integrating IKS into educational frameworks. It also highlights the role of NEP 2020, the relevance of eco-centric educational models, and the comparative analysis of English curricula from the Central Board of Secondary Education (CBSE) and Rajasthan Board of Secondary Education (RBSE). Historical marginalization of indigenous knowledge systems as European powers imposed Western-centric educational frameworks. These frameworks prioritized scientific rationality, individualism, and linear progress while sidelining the eco-centric, community-oriented knowledge embedded in IKS (Shiva, 1988; Kumar, 2021). Colonial education systems served the interests of imperial powers, creating an administrative class aligned with colonial objectives rather than preserving indigenous epistemologies (Raina, 2019). Even after independence, the remnants of these colonial systems persisted, often reflecting Western epistemologies in curricula. Scholars such as Bowers (2001) and Shiva (2005) argue that modern education systems, driven by global capitalist ideologies, continue to marginalize IKS, favoring economic and technological advancement over cultural and ecological diversity.

The impact of capitalism on education

Capitalism has profoundly influenced education, framing it as a tool for economic mobility rather than a means for holistic development. Apple (2004) critiques capitalist educational frameworks for perpetuating inequalities by prioritizing market-driven outcomes. English, as a global language, exemplifies this dynamic, as its mastery is often linked to socioeconomic advancement. However, this emphasis often sidelines IKS, viewing it as less valuable in the global marketplace (Ramanathan, 2005). Shiva (2005) highlights that capitalist-driven education homogenizes knowledge, erasing diverse indigenous epistemologies. This commodification of education not only undermines cultural heritage but also diminishes the potential for creating

equitable, sustainable learning environments.

NEP 2020 and the revival of indigenous knowledge systems
The National Education Policy (NEP) 2020 marks a paradigm shift in Indian education, emphasizing the need to incorporate IKS into mainstream curricula. This policy aims to decolonize education by integrating traditional knowledge systems across disciplines, including language education (Government of India, 2020). Kumar (2021) underscores that while NEP 2020's focus on IKS is promising, its successful implementation requires educators to develop context-sensitive pedagogical strategies. Batra (2021) argues that the integration of IKS into curricula should move beyond tokenism to foster holistic and inclusive education that aligns with ecological and cultural sustainability.

Eco-Centric educational models and global perspectives

Globally, alternative educational models offer valuable insights into integrating ecological and cultural values into curricula. Initiatives like Bhutan's Green School System (Wangchuk, 2017), the Students' Educational and Cultural Movement of Ladakh (SECMOL), and the Barefoot College in Rajasthan emphasize practical, community-based learning that promotes sustainability (Norberg-Hodge, 1991; Dema, 2017). These models challenge the dominance of capitalist education by prioritizing local knowledge, ecological balance, and social equity. For example, Bhutan's Green School System fosters environmental stewardship, while SECMOL and Barefoot College empower learners to address local challenges through community-oriented education. Internationally, movements like the *Māori Kōhanga Reo* in New Zealand and Hawaiian Pūnana Leo preschools further illustrate the global potential of integrating indigenous pedagogies into formal education (Dey, 2023).

Comparative analysis of CBSE and RBSE English curricula

A critical analysis of English textbooks from CBSE and RBSE provides insights into how IKS is incorporated into Indian education. Previous studies indicate that textbooks play a pivotal role in shaping students' understanding of cultural heritage and worldviews (Altbach, 1991). Content analysis reveals disparities in the representation of IKS between the CBSE and RBSE curricula. While CBSE textbooks often reflect a broader, globalized perspective, RBSE materials tend to include localized cultural elements. This divergence underscores the challenges of balancing standardization with the preservation of regional knowledge systems (Ramanathan, 2005).

Challenges in implementing IKS

The reviewed literature identifies several barriers to integrating IKS into education. These include entrenched colonial legacies, capitalist ideologies, and a lack of teacher training in IKS-based pedagogies (Batra, 2021). Effective implementation requires not only curricular reforms but also capacity building for educators to engage critically with indigenous knowledge.

The reviewed literature also highlights the historical marginalization of IKS, the pervasive influence of capitalism on education, and the opportunities presented by NEP 2020 to transform Indian education. By drawing on global examples of eco-centric educational models and analyzing the discrepancies between CBSE and RBSE curricula, this review underscores the need for a more inclusive and sustainable approach to education. The integration of IKS into curricula is not merely an act of preservation but a step toward creating an education system that values ecological sustainability, cultural diversity, and social equity.

Significance of the study

The growing frequency and intensity of climate and environmental disasters highlight a critical flaw in current approaches to sustainability: the reliance on top-down institutional policy-making and governmental initiatives that often fail to address the root causes of ecological degradation. This study, therefore, emerges as a crucial intervention in rethinking educational curricula and pedagogies to address these issues from the ground up. The importance of this research lies in its potential to disrupt the entrenched capitalistic frameworks that prioritize profit over environmental and societal well-being, which has historically led to disastrous consequences, such as the Bhopal gas tragedy and ongoing ecological exploitation in various parts of India and globally.

This study is particularly significant in the context of the National Education Policy (NEP) 2020, which emphasizes the revival and integration of the Indian Knowledge System (IKS) into the educational framework. By analyzing the presence (or lack thereof) of IKS in English textbooks used in schools governed by the Central Board of Secondary Education (CBSE) and the Rajasthan Board, this research seeks to illuminate the extent to which current educational practices align with the NEP's vision of fostering indigenous knowledge and sustainable practices.

The study also underscores the urgent need to dismantle capitalistic curricula that often perpetuate socio-economic inequities and environmental harm. By exploring alternative educational models—such as Bhutan's Green School System (Wangchuk, 2017), New Zealand's Kaupapa Māori education, and India's Happiness Curriculum (NCERT, 2020)—the research aims to highlight the potential of green pedagogical spaces in promoting sustainability, social justice, and holistic learning. These models demonstrate how education can be reimagined to not only include but actively promote eco-centric knowledge values, offering students practical, hands-on experiences that connect them directly with the natural environment.

The significance of this study also extends to its potential impact on policy and curriculum development. By providing a detailed comparative analysis of the incorporation of IKS in English textbooks, the research offers valuable insights for educators, policymakers, and curriculum developers who are working to implement the NEP-2020 recommendations. Curriculum designers can use these insights to create more effective, student-centered curriculum that incorporate

peer-based activities aimed at improving language skills, promoting growth mindsets, and increasing student engagement (Namaziandost et al., 2024). The findings could inform more effective strategies for integrating indigenous knowledge into mainstream education, thereby preserving and promoting India's rich cultural heritage while also contributing to global efforts to create more sustainable, equitable, and socially just educational systems.

In essence, this study is not just an academic inquiry but a call to action—urging a shift from capitalistic, profit-driven educational models to those that prioritize the well-being of both people and the planet. By advancing the conversation on how education can be a powerful tool for ecological and social transformation, this research contributes to the growing body of work that seeks to create a more just and sustainable future for all.

Scope of the research

The scope of this research encompasses a comprehensive analysis of the representation and integration of the Indian Knowledge System (IKS) within English textbooks used in schools affiliated with the Central Board of Secondary Education (CBSE) and the Rajasthan Board of Secondary Education (RBSE). The study's primary focus is on the following key areas:

The research will conduct a detailed content analysis of English textbooks from both the CBSE and RBSE to identify the presence and depth of Indian knowledge, cultural heritage, and eco-centric values as emphasized by the National Education Policy (NEP) 2020. The study will compare how both boards incorporate IKS in their English curriculum, highlighting similarities, differences, and gaps in representation.

The research will assess the extent to which the current English curricula align with the NEP 2020's vision of reviving and integrating the Indian Knowledge System into mainstream education. The study will explore how the incorporation of IKS can contribute to fostering a deeper connection between students and India's rich cultural and ecological heritage.

The research will explore and analyze alternative educational models such as Bhutan's Green School System, New Zealand's Kaupapa Māori education, and India's Happiness Curriculum (NCERT, 2020). These models will be examined for their potential to inspire green curricular and pedagogical reforms in Indian education. The study will also consider the practical application of these models in the Indian context, particularly how they can be adapted to enhance the integration of IKS in English curricula.

By addressing these areas, the research seeks to contribute to a more informed understanding of how educational practices can be reformed to align with the goals of NEP 2020, promote cultural and ecological sustainability, and create a more equitable and just education system in India. The study's findings are expected to have significant implications for curriculum design, policy formulation, and the future

direction of education in India. The research engages in a thorough content analysis of English textbooks from both the Central Board of Secondary Education (CBSE) and the Rajasthan Board of Secondary Education (RBSE) to critically examine the inclusion and depth of Indian knowledge, cultural heritage, and eco-centric values as prescribed by the National Education Policy (NEP) 2020. This approach is not just a mere assessment of content, but a deeper exploration of how educational materials reflect and perpetuate cultural identity and environmental consciousness among students.

Significance of content analysis in educational research

Thematic Representation of Significance of Content Analysis in Educational Research

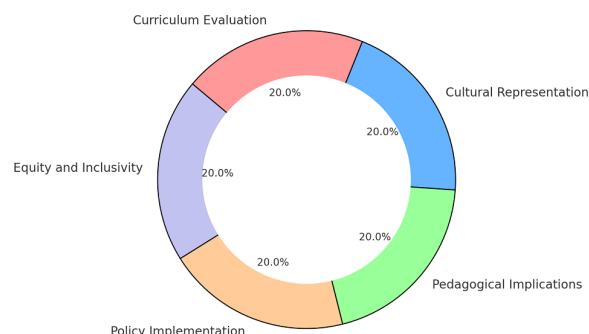


Figure 2. Thematic representation.

Content analysis is a valuable method in educational research that allows for the systematic examination of textual material. In this context, it serves as a tool to uncover underlying messages, ideologies, and values conveyed through educational content. By focusing on English textbooks, the research taps into a critical medium through which language, culture, and values are transmitted to students across India. As English is not only a subject but also a vehicle for broader educational objectives, analyzing its content provides insights into how the NEP 2020's goals are being implemented at the ground level.

The NEP 2020 emphasizes the integration of India's rich cultural heritage and indigenous knowledge systems into the curriculum. This is rooted in the understanding that education should not only impart technical and cognitive skills but also foster an appreciation for the country's cultural and historical legacy (NEP 2020). Through content analysis, this research investigates how English textbooks from CBSE and RBSE boards incorporate Indian literary traditions, historical narratives, and cultural symbols.

For example, the inclusion of classical texts such as the Ramayana and Mahabharata, or the works of poets like Kabir and Tagore, within English language curricula, is a direct reflection of NEP 2020's objectives. These texts do not just serve as literary studies but as conduits for passing down cultural values and moral lessons integral to the Indian ethos. Kumar (2019) argues that the integration of indigenous literature in school curricula not only enhances linguistic skills but also strengthens cultural identity and

continuity among students.

Eco-centric education is another cornerstone of the NEP 2020, which advocates for environmental consciousness and sustainable living practices to be woven into the fabric of education. This research investigates whether English textbooks convey eco-centric values through stories, essays, and poems that emphasize the importance of nature, environmental stewardship, and the interdependence between humans and the environment. An example of this can be seen in the inclusion of essays on environmental movements such as the Chipko Movement, which not only highlight historical events but also serve as a moral framework for students to understand the significance of ecological balance and activism. Research by Sharma and Singh (2021) highlights the critical role that educational content plays in shaping students' environmental awareness and attitudes, advocating for the inclusion of more eco-centric themes in school curricula.

The comparative nature of this research allows for an examination of the variances between CBSE and RBSE in terms of how these values are presented. The CBSE, with its national outlook, may emphasize a broader inclusion of pan-Indian cultural and ecological narratives, whereas the RBSE might focus more on regional cultural and environmental contexts specific to Rajasthan. Such a comparative approach is crucial as it reveals not only the alignment with national educational policies but also highlights the potential disparities that exist between different educational boards. This, in turn, can inform future policy adjustments to ensure a more uniform and inclusive educational experience across the country. A study by Mishra (2020) on the representation of regional and national identities in Indian educational materials suggests that discrepancies between different educational boards can lead to a fragmented understanding of national identity among students.

By conducting a detailed content analysis of English textbooks from CBSE and RBSE, this research seeks to uncover the depth and presence of Indian knowledge, cultural heritage, and eco-centric values within these educational materials. Such an analysis is essential in understanding how effectively the NEP 2020's goals are being realized in actual educational practice and what further steps might be necessary to ensure that Indian students receive an education that is both globally relevant and deeply rooted in their cultural and environmental heritage.

Comparative analysis of the Indian Knowledge System (IKS) in CBSE and RBSE English curricula

A bar chart representing the comparative analysis of the Indian Knowledge System (IKS) in CBSE and RBSE English curricula across four categories: IKS Representation, Cultural Heritage, Eco-Centric Values, and Alignment with NEP 2020. The chart highlights the differences and similarities in how these aspects are incorporated into the English curricula of both educational boards. The integration of Indian Knowledge Systems (IKS) within the English curricula of the Central Board of Secondary Education (CBSE) and the Rajasthan Board of Secondary Education (RBSE) reveals

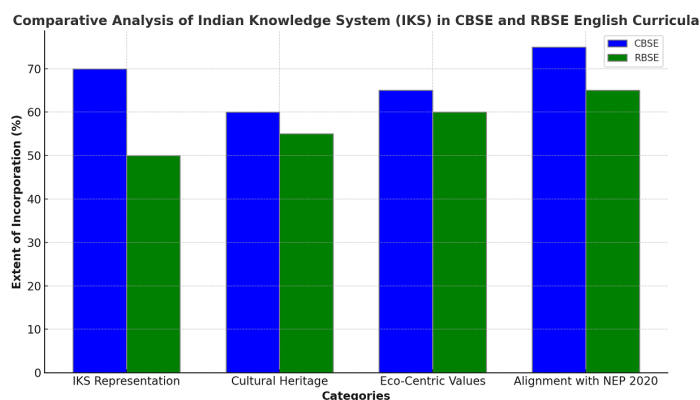


Figure 3. Comparative analysis of IKS in CBSE and RBSE.

significant insights into how each board approaches the representation of indigenous knowledge, cultural heritage, and eco-centric values, as emphasized by the National Education Policy (NEP) 2020. This comparative analysis highlights the similarities, differences, and gaps in representation within these curricula.

Both CBSE and RBSE have made efforts to integrate Indian cultural heritage and values within their English curricula, although the extent and depth vary. A common feature in both boards is the inclusion of texts that reflect India's rich literary tradition. For instance, both curricula feature works by Indian authors such as R.K. Narayan, Rabindranath Tagore, and Premchand, whose stories often portray Indian social norms, ethical values, and cultural practices.

Furthermore, both boards include passages and essays that discuss India's historical achievements and contributions to various fields such as science, mathematics, and philosophy. For example, essays on India's space achievements or the legacy of ancient Indian mathematicians like Aryabhata and Brahmagupta appear in textbooks from both boards, aligning with the NEP 2020's emphasis on showcasing India's intellectual heritage.

Despite these similarities, the depth and approach to incorporating IKS differ significantly between the two boards. The CBSE curriculum, for example, tends to adopt a more global perspective while integrating IKS, often juxtaposing Indian texts with global literature to provide students with a comparative understanding. This approach is evident in the inclusion of texts that pair Indian folklore with global fables, encouraging students to appreciate cultural diversity and universal themes. In contrast, the RBSE curriculum places a stronger emphasis on regional and local content, particularly focusing on Rajasthani culture and traditions. For example, RBSE textbooks may include folk tales from Rajasthan, discussions on the state's historical figures, and essays on local festivals and customs, thus offering students a more localized understanding of Indian culture.

However, this localized focus sometimes results in a narrower perspective, with RBSE textbooks potentially lacking the broader, pan-Indian view that CBSE texts provide. This difference is significant because while RBSE students gain a deep understanding of their immediate cultural surroundings, they may miss out on the broader

cultural narratives that are more prevalent in the CBSE curriculum. Both boards, despite their efforts, exhibit gaps in the representation of IKS, particularly in the context of eco-centric values and indigenous knowledge. The NEP 2020 emphasizes the need for education to incorporate sustainable practices and indigenous environmental knowledge, yet this is often underrepresented in the English curricula of both CBSE and RBSE.

For instance, while both boards include some environmental themes, these are often generic and lack a direct connection to India's indigenous knowledge systems. Topics such as the Chipko Movement or the Bishnoi community's environmental practices, which are critical to understanding India's eco-centric traditions, are either briefly mentioned or entirely absent. This gap suggests a missed opportunity to educate students on the vital role of indigenous practices in sustainable development, a core aspect of the NEP 2020.

Moreover, the representation of marginalized communities and their knowledge systems remains insufficient. Both curricula tend to focus on mainstream Indian culture, often neglecting the rich and diverse traditions of India's tribal and rural populations. This omission perpetuates a limited understanding of India's cultural and ecological diversity among students. A comparative look at specific textbooks can further illustrate these points. For instance, a CBSE English textbook for Class X might include an essay on Gandhi's philosophy of non-violence alongside a global text on Martin Luther King Jr.'s civil rights movement, thus framing Indian knowledge within a global context. In contrast, an RBSE textbook might feature a detailed account of the Marwar region's history, focusing on local heroes like Maharana Pratap, but might not include comparative global content.

While both curricula include environmental themes, the treatment of these topics often lacks depth. A chapter on environmental conservation in a CBSE textbook might discuss global climate change without delving into India's indigenous practices that contribute to sustainability, whereas an RBSE textbook might include a passage on the importance of preserving local flora and fauna but fail to connect these practices to broader environmental challenges.

The analysis reveals that while both CBSE and RBSE have incorporated elements of the Indian Knowledge System into their English curricula, there are notable differences in their approaches and significant gaps in representation. The CBSE curriculum offers a broader, more comparative perspective that connects Indian knowledge with global narratives, whereas the RBSE curriculum provides a more localized focus on Rajasthani culture. However, both curricula fall short of adequately representing eco-centric values and the diverse indigenous knowledge systems of India, highlighting a need for a more comprehensive integration of these elements in alignment with the NEP 2020.

The diagram representing the "Evaluation of Curriculum Alignment with NEP 2020." It outlines the process from analyzing CBSE and RBSE curricula, comparing the inclusion of Indian Knowledge Systems (IKS), evaluating

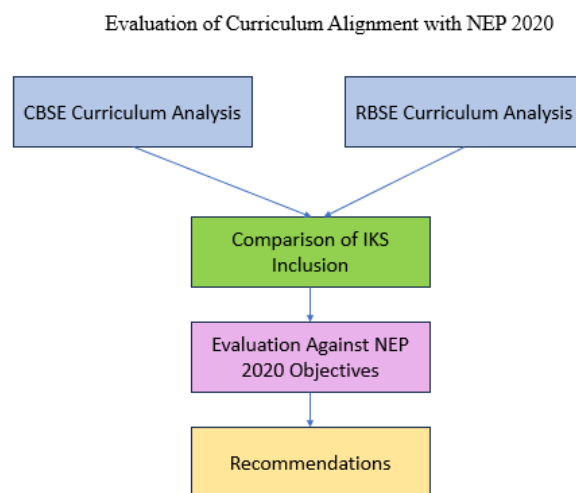


Figure 4. Evaluation of curriculum alignment with NEP 2020.

alignment with NEP 2020 objectives, and concluding with recommendations.

The National Education Policy (NEP) 2020 represents a significant shift in India's educational philosophy, emphasizing the need to revitalize and integrate the Indian Knowledge System (IKS) into mainstream education. This policy reflects an intention to move beyond the traditional Western-centric curriculum to one that acknowledges and celebrates India's rich cultural, philosophical, and ecological heritage. In this context, the research will critically evaluate the alignment of the current English curricula of the Central Board of Secondary Education (CBSE) and the Rajasthan Board of Secondary Education (RBSE) with the NEP 2020's vision.

Assessing curriculum alignment with NEP 2020

The NEP 2020 calls for a curriculum that not only includes Indian knowledge but also embeds it in ways that resonate with students, making it relevant and engaging. This involves a holistic approach that integrates traditional Indian wisdom across various disciplines, particularly in humanities subjects like English, where literature and language offer fertile ground for exploring cultural narratives. For instance, CBSE's English curriculum includes classic Indian texts like "Kabuliwala" by Rabindranath Tagore and "My Experiments with Truth" by Mahatma Gandhi. These texts reflect Indian socio-cultural contexts and ethical values, thus aligning with NEP 2020's call to integrate IKS. However, the presence of such texts in the RBSE curriculum is often limited to regional works, such as stories by Rajasthani authors, which, while culturally significant, may not fully reflect the pan-Indian knowledge system that the NEP envisions.

The NEP emphasizes environmental education, which includes the integration of India's traditional ecological knowledge. However, the incorporation of eco-centric values in both CBSE and RBSE English curricula remains sparse. The study will evaluate how topics related to India's

indigenous environmental practices, such as the Chipko Movement or the Bishnoi community's conservation efforts, are included or neglected in these curricula. For example, while the Chipko Movement might be mentioned in passing in a CBSE textbook, a detailed discussion linking it to current environmental issues, as the NEP advocates, may be missing.

The incorporation of IKS in the curriculum is not just about adding content; it is about fostering a deeper, more intrinsic connection between students and their heritage. The NEP 2020 envisions a curriculum that helps students develop a sense of pride and identity rooted in India's cultural and ecological heritage. The study will explore whether the current curricula facilitate this connection.

In many CBSE schools, the study of Indian authors and themes might be juxtaposed with global literature to provide a comparative perspective. This approach, while valuable, can sometimes dilute the focus on Indian knowledge. For example, a textbook might feature a chapter on the Vedic period alongside a discussion of the Renaissance, which may lead to an unequal emphasis on Western historical developments over Indian contributions. On the other hand, RBSE's focus on local history and culture can create a strong regional identity but may lack a broader connection to India's national heritage. The research will assess whether such curricula contribute to a fragmented understanding of India's cultural and ecological wealth, which the NEP 2020 seeks to address.

In conclusion, the research critically assessed how well the CBSE and RBSE English curricula align with the NEP 2020's goals of integrating IKS and fostering connections to India's cultural and ecological heritage. Through detailed content analysis, the study identifies the strengths and weaknesses of each board in achieving these educational objectives and provides recommendations for enhancing the representation of IKS in mainstream education.

The integration of Indigenous Knowledge Systems (IKS) into mainstream education, as envisioned by the National Education Policy (NEP) 2020, calls for a rethinking of traditional pedagogical approaches. To facilitate this integration, it is essential to explore alternative educational models that have successfully embedded indigenous knowledge and eco-centric values into their curricula. This section of the research examines pedagogical models from different parts of the world, such as Bhutan's Green School System (Wangchuk, 2017), New Zealand's Kaupapa Māori education, and India's Happiness Curriculum (NCERT, 2020), to assess their potential for inspiring green curricular and pedagogical reforms in Indian education.

Bhutan's Green School System (Wangchuk, 2017) is a pioneering model that emphasizes holistic education, integrating environmental sustainability, cultural preservation, and social well-being into the curriculum. This model is built on the philosophy of Gross National Happiness (GNH), which prioritizes the collective well-being of citizens over mere economic growth. The Green School System (Wangchuk, 2017) encourages students to connect with nature, understand their cultural roots, and develop a sense of responsibility towards their community and the

environment.

In Bhutan, the curriculum is designed to foster a strong sense of environmental stewardship among students. For instance, students are involved in activities such as tree planting, waste management, and the study of local ecosystems. The curriculum also includes the study of traditional Bhutanese knowledge, such as indigenous agricultural practices and medicinal plants, which are deeply rooted in the country's cultural heritage.

The potential for adapting elements of Bhutan's Green School System to the Indian context lies in its emphasis on ecological consciousness and cultural preservation. For example, integrating similar practices into Indian schools could involve students in projects related to local environmental conservation, traditional farming techniques, or the study of regional flora and fauna. This approach could complement the NEP 2020's goal of embedding IKS into the curriculum, particularly in subjects like Environmental Science and Social Studies, but could also extend to English by including eco-centric themes in literature and writing assignments.

New Zealand's Kaupapa Māori education is a bicultural model that centers on Māori values, language, and knowledge systems. It aims to empower Māori students by providing an education that reflects their cultural identity and heritage. This model is based on principles of self-determination (*tino rangatiratanga*), the importance of language and culture (*te reo Māori me ōna tikanga*), and the collective responsibility of the community (*whānau*).

In Kaupapa Māori schools, the curriculum is designed to reflect Māori worldviews, with a strong emphasis on the language, history, and traditions of the Māori people. For example, students might study Māori legends (*pūrākau*) as part of their English or Social Studies curriculum, alongside the mainstream literature. The teaching methods also incorporate Māori pedagogical practices, such as collaborative learning (*ako*) and storytelling. The relevance of the Kaupapa Māori model to Indian education lies in its successful integration of indigenous knowledge into a national education system. India, with its rich tapestry of diverse cultures and languages, can draw inspiration from this model to develop curricula that reflect the unique cultural identities of different regions while promoting a sense of national unity. For instance, English curricula in India could include regional folklore, proverbs, and oral histories as part of language instruction, thereby preserving and promoting local knowledge systems.

The Happiness Curriculum, introduced in Delhi government schools, is a unique initiative aimed at fostering emotional well-being and holistic development among students. It focuses on mindfulness, emotional intelligence, and ethics, rather than academic achievement alone. The curriculum is designed to create a positive school environment where students learn to manage their emotions, build healthy relationships, and develop a sense of social responsibility. In the Happiness Curriculum (NCERT, 2020), students participate in activities like mindfulness meditation, storytelling, and group discussions that encourage them to reflect on their

feelings, values, and relationships. For instance, a typical class might begin with a mindfulness exercise, followed by a discussion on themes such as empathy or honesty, which are then connected to real-life situations.

The Happiness Curriculum (NCERT, 2020)'s emphasis on social-emotional learning can be linked to the broader goals of the NEP 2020, particularly in terms of creating an education system that values holistic development and well-being. By incorporating similar practices into the English curriculum, educators could encourage students to explore themes of personal and social identity through literature, creative writing, and group activities. This approach not only aligns with the NEP's vision of a well-rounded education but also provides a platform for integrating IKS by exploring indigenous concepts of community, morality, and well-being.

While these alternative models offer valuable insights, their adaptation to the Indian context requires careful consideration of the country's diverse educational landscape, socio-economic conditions, and cultural heritage. The research explores how these models can be practically applied to enhance the integration of IKS in Indian schools, particularly in the English curriculum. For instance, incorporating Bhutan's focus on environmental education could involve developing English lessons that include literature on Indian environmental movements, essays on local ecological practices, or creative writing assignments on sustainability. Similarly, adapting principles from the Kaupapa Māori model might involve integrating regional languages and stories into the English curriculum, allowing students to engage with their cultural heritage in meaningful ways. Finally, elements of the Happiness Curriculum (NCERT, 2020) could be used to introduce reflective writing exercises, discussions on ethical dilemmas, or narratives that explore themes of mental health and well-being.

In summary, by exploring and analyzing these alternative pedagogical models, the research aims to provide a blueprint for how Indian education can incorporate green and culturally inclusive curricula that resonate with the NEP 2020's vision of integrating the Indian Knowledge System. Through practical examples and a focus on contextual adaptation, the study offers actionable recommendations for enhancing the role of IKS in Indian education.

Findings and suggestions

The research reveals that while both CBSE and RBSE English curricula incorporate elements of the Indian Knowledge System (IKS), there are significant disparities in the depth and breadth of this integration. CBSE textbooks tend to include more diverse representations of India's cultural heritage and eco-centric values, in alignment with the National Education Policy (NEP) 2020, albeit in a somewhat superficial manner. In contrast, RBSE textbooks often emphasize regional knowledge but lack a comprehensive approach to embedding IKS across the curriculum. This inconsistency highlights a gap in effectively integrating IKS in a way that resonates with the diverse cultural and ecological contexts across India.

To address these gaps, it is recommended that both boards adopt a more holistic approach to curriculum design, drawing inspiration from successful alternative educational models such as Bhutan's Green School System (Wangchuk, 2017) and New Zealand's Kaupapa Māori education. By incorporating these models' emphasis on ecological consciousness, cultural preservation, and holistic learning, the Indian education system can better align with the NEP 2020 vision. Additionally, practical steps should be taken to enhance teacher training and resource development to ensure that educators are equipped to deliver a curriculum that authentically integrates IKS and fosters a deeper connection between students and India's rich cultural and ecological heritage.

Conclusion

This research has brought to light critical gaps and inconsistencies in the integration of the Indian Knowledge System (IKS) and eco-centric values within the English curricula of CBSE and RBSE. Despite the directives of the National Education Policy (NEP) 2020 to revitalize India's cultural heritage and promote sustainable education, the findings reveal a disjointed approach to curriculum design. While both boards include cultural and historical references, these representations are often tokenistic, lacking the depth necessary to reflect the richness of India's diverse knowledge traditions and ecological wisdom. Moreover, environmental themes, essential for nurturing an ecologically conscious generation, remain underrepresented, further underscoring the missed opportunities to align education with sustainable development goals.

One of the central findings of this study is the pervasive influence of capitalist pedagogical frameworks that prioritize global market demands, profit-driven education models, and individual achievement over community well-being, cultural inclusivity, and environmental stewardship. This entrenched system marginalizes IKS, reducing its potential to contribute meaningfully to the intellectual and moral development of students. Such systemic issues perpetuate an education model that is at odds with the NEP 2020's vision of fostering holistic learning grounded in cultural and ecological interconnectedness.

The study highlights the pressing need for a re-imagined curriculum that aligns with the NEP 2020's objectives and integrates IKS and eco-centric values as foundational components. Successful implementation requires moving beyond superficial inclusions to adopt a more robust and cohesive framework. Models such as Bhutan's Green School System and New Zealand's Kaupapa Māori education provide compelling examples of how indigenous knowledge and environmental consciousness can be seamlessly incorporated into education systems. These models emphasize community-driven, experiential, and ecologically aligned pedagogies that prioritize sustainability, cultural heritage, and student empowerment.

To realize this vision in the Indian context, concerted efforts are needed at all levels of the education system. Policymakers must ensure that curriculum reforms are

not just policy statements but are operationalized with measurable objectives and practical guidelines. Educators must be equipped through targeted training programs to teach IKS and sustainability-focused curricula effectively. Curriculum developers need to collaborate with scholars, community leaders, and practitioners to design content that genuinely reflects India's cultural and ecological diversity. The broader implications of these reforms extend beyond school education. By embedding IKS and eco-centric principles in the curriculum, Indian education can cultivate students who are not only academically competent but also deeply connected to their cultural roots, environmentally conscious, and equipped to address global challenges such as climate change and cultural homogenization. Such an education system would contribute to a generation of learners who value equity, sustainability, and community well-being, ensuring that knowledge production aligns with the dual goals of preserving cultural heritage and fostering global citizenship.

In conclusion, the findings of this study underscore the transformative potential of an education system that truly embraces the NEP 2020's vision. By addressing the existing gaps and inconsistencies and adopting innovative, inclusive, and sustainability-driven pedagogical models, Indian education can emerge as a global exemplar of culturally rooted and ecologically aware learning. This transformation will not only benefit students but also contribute to a more sustainable and equitable future for society at large.

References

- Altbach, P. G. (1991). *Textbooks and publishing in the third world: Problem and prospects*. Garland Publishing.
- Apple, M. W. (2004). *Ideology and curriculum*. Routledge Falmer.
- Batra, P. (2021). *Indian education: Emerging perspectives and practices*. Routledge.
- Bowers, C. A. (2001). *Educating for eco-justice and community*. University of Georgia Press.
- Dema, T. (2017). The green school system in Bhutan: A review. *Bhutan Journal of Education*, 5(1), 24-35. <https://doi.org/10.21659/rupkatha.v13n3.03>
- Dey, S. (2023). *Green academia towards eco-friendly education systems*. Routledge.
- Giroux, H. A. (2004). *The terror of neoliberalism: Authoritarianism and the eclipse of democracy*. Paradigm Publishers.
- Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- Kumar, A. (2019). Indigenous literature in school curricula: Strengthening cultural identity through education. *Journal of Educational Studies*, 45(3), 215-229. <http://dx.doi.org/10.1007/978-94-017-9355-1>
- Kumar, K. (2021). *Politics of education in colonial India*. Routledge.
- Mishra, R. (2020). Representation of regional and national identities in Indian educational materials. *International Journal of Educational Research*, 99, 101524.
- Namazandost, E., Behbahani, H. K., & Naserpour, A. (2024). Peer support in language learning: Mitigating anxiety, enhancing achievement, cultivating growth mindsets, and increasing enjoyment. *Journal of Applied Learning & Teaching*, 7(2), 296-313. <https://doi.org/10.37074/jalt.2024.7.2.40>
- National Council of Educational Research and Training (NCERT). (2020). *Happiness Curriculum Framework*. <https://www.ncert.nic.in>
- National Education Policy (NEP). 2020. *Ministry of Human Resource Development*, Government of India. <https://www.education.gov.in>
- Norberg-Hodge, H. (1991). *Ancient futures: Learning from Ladakh*. Sierra Club Books.
- Raina, V. (2019). *Decolonizing the Indian mind: The impact of colonialism on education and society*. Academic Press.
- Raina, V., & Dey, S. (2020). Reviving indigenous knowledge through school curriculum: A critical analysis of NEP 2020. *International Journal of Social Sciences and Humanities*, 11(2), 123-137. 202406-01-017557
- Ramanathan, V. (2005). *The English-vernacular divide: Postcolonial Language politics and practice*. Multilingual Matters.
- Sharma, P., & Singh, R. (2021). The role of eco-centric education in shaping environmental awareness among students. *Environmental Education Research*, 27(4), 489-504. <http://dx.doi.org/10.31893/multirev.2024spe012>
- Shiva, V. (1988). *Staying alive: Women, ecology, and development*. Zed Books.
- Shiva, V. (2005). *Earth democracy: Justice, sustainability, and peace*. South End Press.
- Wangchuk, J. (2017). Gross national happiness and education: The case of green schools in Bhutan. *Journal of Bhutan Studies*, 37(1), 45-58. <http://dx.doi.org/10.13140/RG.2.1.2624.3046>

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