



Role of NEP 2020 in Promoting Digital Universities and Flexible Learning Pathways in Indian Higher Education

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ABSTRACT

An important change to India's higher education system is the National Education Policy (NEP) 2020, particularly in its emphasis on digital universities and flexible learning pathways. Recognizing the need to enhance access, equity, quality, and global competitiveness, NEP 2020 integrates digital infrastructure, credit mobility, blended learning, and multidisciplinary approaches into a cohesive transformation strategy. This paper critically examines how NEP 2020 promotes digital universities through centralized digital platforms, online and blended learning ecosystems, and the Academic Bank of Credits (ABC). It further analyses the policy's role in enabling flexible academic mobility via multiple entry and exit options and credit transfer mechanisms. Drawing upon policy documents, empirical research, and international higher education frameworks, the research evaluates the prospects and difficulties associated with digital transformation in college education in India. The results indicate that while NEP 2020 provides a progressive roadmap for democratizing higher education and promoting lifelong learning, effective implementation requires addressing digital inequity, faculty preparedness, infrastructural limitations, governance reforms, and financial sustainability. The paper concludes that digital universities and flexible pathways can significantly reshape India's higher education landscape if supported by inclusive and strategic policy execution.



1. INTRODUCTION

Higher education has a crucial function in the growth of the country by fostering innovation, enhancing human resources, and promoting social mobility. Because it fosters innovation, increases human capital, and encourages social mobility, a college education is essential to success of a country. Universities and other higher education establishments help societal improvement and economic prosperity by acting as hubs for professional training, research advancement, and knowledge generation. The higher education sector is especially significant in emerging nations like India because it fosters technical improvement, skill development, and the production of a workforce that is globally competitive. Due to a significant rise in HEIs over the past few decades, India now boasts one of the largest higher education systems in the world. However, the system still faces a number of institutional and structural issues that restrict its overall efficacy and inclusivity, even in spite of this quantitative expansion. Rigid and discipline-specific curricula, low research output, unequal access to high-quality education, and disjointed governance and regulatory frameworks are just a few of the enduring problems that academics have found in the system of higher education in India (Agarwal, 2009; Tilak, 2018). Significant differences still exist between socioeconomic classes, genders, and geographical areas even if the higher education sector's Gross Enrolment Ratio (GER) has progressively improved in recent years. Barriers pertaining to infrastructure, financial resources, and access to high-quality institutions are frequently encountered by students from remote locations and economically disadvantaged households. These difficulties underscore the necessity of extensive changes targeted at improving the accessibility, quality, and flexibility of higher education in India.

In this regard, NEP 2020, the National Education Policy announcement represents critical turning point in the development of education system of India. By encouraging interdisciplinary learning, institutional autonomy, research innovation, and technological integration, NEP 2020 offers a comprehensive plan for reorganizing the higher education industry. By 2040, the policy aims to establish a comprehensive, adaptable, and technologically advanced college education ecosystem (GOI, 2020). The policy's focus on digital transformation and flexible learning pathways, which go against the conventional campus-based and linear paradigm of higher education, is one of its most prominent elements. At the same time, the COVID-19 pandemic's worldwide disruptions and the quick development of digital technologies have sped up the implementation of online and technology-enabled schooling worldwide. According to studies, when supported by suitable technology infrastructure and efficient instructional design, digital learning environments can increase educational access, foster pedagogical innovation, and provide flexible learning opportunities (Dhawan, 2020; Hodges et al., 2020).



Acknowledging these advancements, NEP 2020 suggests creating a Digital University and implementing the Academic Bank of Credits (ABC) in order to support students' academic mobility, interdisciplinary learning, and chances for lifelong learning.

These programs are part of a larger movement in India toward a more adaptable, technologically advanced, and student-focused system of higher education designed to meet both the demands of the information economy and the needs of students in the twenty-first century.

2.REVIEW OF RELATED LITERATURE

Author's Name &Year	Focus of Study	Findings of the study	Relevance to the Current Research
Mishra & Koehler (2006)	<i>Technological Pedagogical Content Knowledge(TPACK)</i>	According to this study, topic competence, pedagogical abilities, and technological understanding are all necessary for successful technology integration in the classroom.	Offers a theoretical framework for using digital tools into instructional strategies.
Altbach & Knight (2007)	<i>Globalization and transformation in higher education</i>	Higher education systems are greatly impacted by globalization and technological advancements, which also foster international academic cooperation.	Draws attention to the increasing significance of digital technology and international academic connectedness in higher education.
Agarwal (2009)	<i>Structure and governance of Indian higher education</i>	Identifies fundamental problems such disjointed governance, complicated regulations, and problems with policy implementation.	Gives background information for comprehending the necessity of modernizing and reforming the higher education system.
Altbach & Salmi (2011)	<i>Role of research universities in global competitiveness</i>	Academic excellence and national innovation are greatly enhanced by universities with robust research infrastructures	Affirms the significance of enhancing university research and technology capabilities.



Author's Name &Year	Focus of Study	Findings of the study	Relevance to the Current Research
		and cutting-edge technology.	
Varghese (2015)	<i>Governance reforms in higher education</i>	Highlights the necessity of enhanced governance frameworks, better policy coordination, and institutional autonomy.	Supports the governance changes required to modernize higher education.
European Commission (2018)	<i>European Credit Transfer System and Bologna Process</i>	International institutional cooperation and academic mobility are made easier by standardized credit transfer systems.	Offers a global paradigm for putting flexible credit transfer mechanisms into place.
Tilak (2018)	<i>Quality, equity, and financing in higher education</i>	Draws attention to ongoing issues with access, quality control, and inadequate public finance for higher education.	Highlights the necessity of measures that enhance accessibility, equity, and quality.
OECD (2019)	<i>Flexible learning pathways and credit systems</i>	Interdisciplinary learning, student mobility, and opportunities for lifelong learning are made possible by credit-based systems.	Affirms the value of adaptable credit systems like the Academic Bank of Credits.
Dhawan (2020)	<i>Online learning during the COVID-19 pandemic</i>	Flexibility is provided by online learning environments and guarantee that instruction continues even in the face of disturbances.	Encourages higher education institutions to use digital learning environments more frequently.
Hodges et al. (2020)	<i>Emergency remote teaching and online education</i>	Distinguishes between well-designed online learning that necessitates efficient instructional planning and	Emphasizes how crucial pedagogically sound digital learning design is.



Author's Name &Year	Focus of Study	Findings of the study	Relevance to the Current Research
		emergency remote teaching.	
Kumar, Singh & Mishra (2021)	<i>Digital divide in Indian higher education</i>	Finds differences in students from various socio-economic background's access to internet connectivity and digital devices.	Highlights the necessity of addressing digital inequality in education that is enabled by technology.
World Bank (2021)	<i>Digital infrastructure and development</i>	Investing in digital infrastructure promotes economic growth, innovation, and educational access.	Emphasizes how crucial it is for higher education systems to upgrade their digital infrastructure.
UNESCO (2025)	<i>Digital transformation and future of higher education</i>	The study emphasizes how digital infrastructure, artificial intelligence, and international cooperation are changing higher education systems.	Offers up-to-date international viewpoints in favor of incorporating cutting-edge technologies into changes in college education.

3.OBJECTIVES OF THE STUDY

1. To analyse the provisions of NEP 2020 related to digital universities in India.
2. To examine how NEP 2020 promotes flexible learning pathways through academic reforms.
3. To evaluate the potential impact of digital universities on access, equity and quality.
4. To identify challenges in implementing digital and flexible learning reforms.
5. To suggest policy recommendations for effective execution.

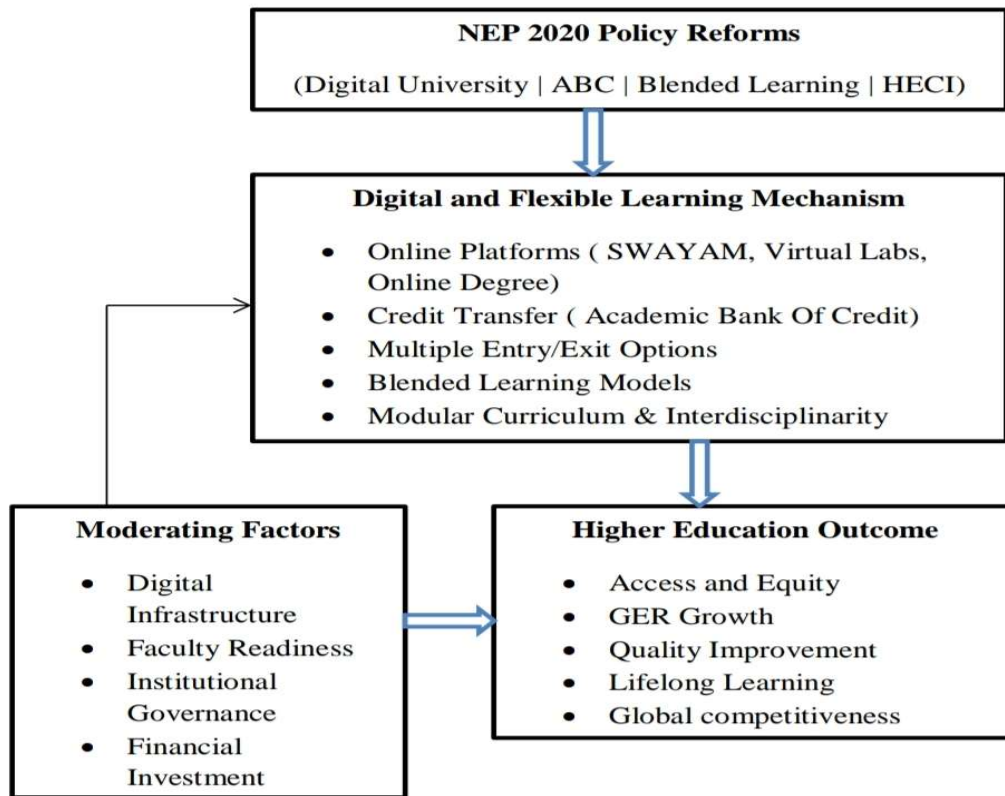


4.METHODOLOGY

Based on methodical analysis of data sources that are secondary, the current study employs a qualitative and analytical research strategy. The Government of India, National Education Policy 2020, which provides the study's fundamental policy framework, is the main document examined. To place the change in the perspective of worldwide trends in digital transformation, peer-reviewed journal papers, policy reports, government publications, books, and international frameworks for higher education were also examined. To find recurrent themes on digital universities, blended learning models, Academic Bank of Credits, multiple entry and departure provisions, governance restructuring, and access and equality challenges, a thematic content analysis approach was used. Conceptual themes like digital infrastructure, academic flexibility, policy implementation, and institutional governance were used to group pertinent literature. To improve analytical depth and offer a more comprehensive interpretive viewpoint, comparative insights from international digital higher education systems and credit transfer models were included. This methodological approach makes it possible to critically assess the provisions of NEP 2020 while looking at its possible ramifications, opportunities, and implementation difficulties in the context of Indian higher education.

5.CONCEPTUAL FRAMEWORK

This study's conceptual framework views NEP 2020 as a transformative policy driver that promotes digital universities and flexible learning paths in order to start structural and pedagogical reforms in Indian University education. The policy recommendations of NEP 2020, such as the creation of a Digital University, the development of the Academic Bank of Credits, the encouragement of both online and blended learning, multidisciplinary curriculum architectures, and governance reforms, constitute the foundation of the framework. These changes serve as enabling tools that promote academic flexibility and digital integration among schools. Higher education becomes more accessible, flexible, and learner-centered with the use of digital platforms, credit transfer systems, modular curriculum design, and numerous entry and exit alternatives. The paradigm also suggests that these strategies operate together to improve access and equity, raise the Gross Enrollment Ratio (GER), improve quality, encourage lifelong learning, and boost global competitiveness, among other systemic consequences. However, moderating factors like the availability of digital infrastructure, faculty preparedness, institutional governance capacity, and financial investment affect how effective this change is. In order to change higher education's future in India, the framework portrays National Education Policy 2020 as a catalytic reform model in which institutional processes, policy provisions, and contextual factors interact.



“Figure 1: Conceptual Framework Linking NEP 2020 Policy Reforms to Digital and Flexible Learning Mechanisms and Higher Education Outcomes”

“Source : Developed by the Author's”

6.RESULTS AND DISCUSSION

The National Education Policy 2020's significance in advancing digital universities and flexible learning pathways in India is revealed through a thematic analysis of policy papers, academic literature, and higher education frameworks. The results are examined in light of the study's goals.

1. NEP 2020 Provisions Related to Digital Universities

Analyzing NEP 2020's provisions pertaining to digital universities in India was the study's primary goal. According to the findings, the proposed formation of a Digital University that uses a hub-and-spoke approach for content generation, delivery, and certification presents a revolutionary vision for digital higher education. By separating the creation of academic content from its delivery methods, this framework hopes to facilitate the widespread distribution of top-notch courses via digital channels. To promote widespread access to higher education, the strategy promotes the integration of national digital



learning platforms including SWAYAM, virtual laboratories, and online degree programs. Without the limitations of actual campus infrastructure, these platforms give Students worldwide have access to top-notch academic resources. In order to create standardized and excellent digital courses, the Digital University model also places a strong emphasis on cooperation amongst top universities.

The results imply that a digital ecosystem of this kind can greatly increase educational opportunities, especially for kids in underserved and rural areas. However, significant funding for digital infrastructure, online pedagogy training for professors, and institutional capacity to oversee extensive digital learning systems are necessary for successful adoption.

2. Promotion of Flexible Learning Pathways

Examining how NEP 2020 encourages flexible learning pathways through academic reforms was the study's second goal. According to the report, the program includes a number of structural changes meant to improve student mobility and academic flexibility. The creation of the Academic Bank of Credit, which enables students to accrue, store, and transfer of academic credits obtained from several schools, among the most important reforms. With the help of this system, students can continue their study across fields and institutions without sacrificing their academic progress. Furthermore, NEP 2020 offers a variety of entry and departure choices for undergraduate programs, enabling students to earn degrees, certificates, or diplomas based on the length of their studies. This method takes into account a variety of student demands while lessening the rigidity of conventional higher education systems.

Additionally, the strategy encourages modular and diverse curriculum, allowing students to take courses from several disciplines. By enabling students to acquire a variety of skill sets, this flexibility promotes holistic learning and creativity. According to the results, NEP 2020 greatly enhances academic mobility and promotes lifelong learning through adaptable educational models.

3. Impact on Access, Equity, and Quality

Evaluating the possible effects of digital universities on access, equity, and quality in higher education was the study's third goal. The analysis shows that by removing infrastructure and geographic constraints, digital education systems may greatly increase access to higher education. Students from rural and remote locations can attend courses offered by prestigious universities without moving to urban areas thanks to online learning platforms and digital universities. This can help improve educational involvement among underprivileged populations and raise the Gross Enrollment Ratio (GER). In terms of quality, digital technology make it possible to access international academic materials, create interactive



learning environments, and employ innovative teaching techniques like integrated learning and flipped classes. When used properly, these strategies can improve learning results and student engagement.

The study does, however, also point up issues with digital inequality. Students from underprivileged groups continue to be impacted by disparities in digital literacy, device availability, and internet connectivity. Digital innovations may inadvertently exacerbate current gaps in education in the absence of focused governmental responses. Thus, maintaining fair digital access continues to be essential to accomplishing NEP 2020's inclusive objectives.

4. Challenges in Implementing Digital and Flexible Learning Reforms

Finding obstacles to the implementation of digital universities and flexible learning pathways was the study's fourth goal. The results point to a number of institutional and structural obstacles that could prevent these reforms from being implemented successfully. The digital divide is one of the biggest challenges, especially in rural and underdeveloped areas where internet access and technology resources are still few. Adequate digital infrastructure, such as online assessment tools, virtual laboratories, and learning management systems, is also lacking in many institutions. Another crucial issue is faculty readiness. Specialized pedagogical and technological skills are necessary for effective online instruction. A lot of teachers are not well-versed in online student engagement techniques and digital instructional design. When credit transfer methods like the Academic Bank of Credits are implemented, administrative and governance issues also arise. Strong regulatory frameworks and technology integration are necessary to provide interoperability among institutions, maintain consistent evaluation systems, and coordinate academic records across universities.

Financial limitations make implementation even more difficult because large-scale digital transformation necessitates ongoing public investment in technology, infrastructure, and institutional capacity building.

5. Policy Recommendations for Effective Implementation

The study's fifth goal was to make policy suggestions for the effective application of flexible learning reforms and digital institutions. A number of strategic actions are suggested in light of the findings. To ensure fair participation in digital education, it is first necessary to develop the digital infrastructure through the expansion of broadband across the country and the availability of reasonably priced devices. Prioritizing public investment in technology infrastructure is essential, especially in underprivileged and rural areas. Second, to improve educators' proficiency with digital pedagogy,



instructional design, and technology, extensive faculty development programs ought to be put in place. Online teaching and learning can be made far more effective with ongoing professional development. Third, the successful operation of the Academic Bank of Credits (ABC) and credit transfer systems depends on robust institutional coordination mechanisms and governance structures. Academic mobility across schools can be facilitated by interoperable digital platforms and standardized criteria. Lastly, in order to maximize the advantages of digital technology while preserving academic engagement and institutional identity, universities should support blended learning models that integrate online and in-person training.

Taking everything into account, the results show that National Education Policy 2020 offers a forward-thinking and revolutionary framework for flexible and digital higher education in India. However, broad implementation, institutional readiness, and persistent policy commitment are ultimately necessary for its success.

CONCLUSION

The NEP 2020 is a revolutionary reforms program that aims to use academic freedom and digital innovation to modernize India's higher education system. The strategy aims to establish a more accessible, learner-centered, and internationally linked education ecosystem by implementing programs like the Digital University, the Academic Bank of Credits (ABC), and flexible entry and exit choices. By encouraging interdisciplinary learning, credit mobility, and technology-enabled instruction, these reforms put the conventional framework of higher education to the test. Digital platforms, blended learning models, and modular curricula have the potential to greatly increase educational opportunities and boost participation in higher education, especially among students from geographically remote or socioeconomically disadvantaged backgrounds, as this study's findings demonstrate. However, a number of favorable circumstances are necessary for these reforms to be implemented successfully. Effective policy implementation requires maintaining long-term financial investments, enhancing faculty competencies in online pedagogy, ensuring fair access to digital infrastructure, and improving institutional governance procedures. The advantages of digital transformation might continue to be dispersed unevenly if these fundamental issues are not resolved.

All things considered, NEP 2020 offers a forward-thinking framework for rethinking Indian higher education's future. Digital universities and flexible learning pathways can improve accessibility, encourage lifelong learning, and improve India standing in the worldwide knowledge economy provided they are properly and inclusively applied.

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