Digital Initiatives of New Education Policy 2020 on Higher Education in India

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Abstract - Education plays a powerful role in building a nation. Education decides the future of the nation and the destiny of its people. The impact will be a long-lasting one in terms of the growth and development of the nation and its citizens. The role of education and its importance cannot be overlooked in today’s world. International styles and conditions are already influencing India’s higher education. For the last number of years, India has attracted a good number of foreign students, including NRIs, in larger numbers, who join various skilled, tutorial, and academic programs. Also, many foreign universities are offering students the opportunity to get their degrees without leaving India. There are trends to liberalize university systems in a way that enables them to reduce the gap with private universities. Although India has made significant steps in terms of improving access to and participation at all levels of education, the common picture of the country’s growth in education is complicated, and there are many ongoing problems and difficulties associated with exposure and participation in education that the country’s growth rate in education, education delivered, educational equity, system efficiency, governance, and governance. The issue of higher education in India has always been prominent as one of the major drivers of public space travel. A good education, of course, opens the way to a rewarding career. The nature of programs offered by HEIs has undergone a massive transformation, resulting in the acquisition of mastery-level skills and competencies that are in greater demand. Degrees generating employment opportunities would be the most likely to be chosen in the future. All of us are deeply concerned about the quality and accessibility of higher education. Advances in digital technology are changing the way educational resources are developed, communicated, and accessed around the world. The use of digital technologies in all sectors of higher education has also gained significant attention in India. This, in turn, helps to improve the quality and accessibility of higher education for many students, as well as the upskilling of teachers across the country. In this prevalent scenario, NEP 2020 is introduced to give thrust to the Indian education system and propel it to the next level. The New Education Policy 2020 announced by the Government of India became a welcome change and news amidst all the bad things happening around the world. Over time, various committees have recommended that the education budget increase be increased to 6% of GDP. This has led to the interest of researchers. The announcement of NEP 2020 was unexpected by many. The proposed NEP 2020 reforms have been something that many academic experts have never seen coming. Although education policy has had an equal impact on school and college education, this article focuses on NEP 2020 and its impact on higher education. This paper also outlines key features of the NEP and analyses how they affect the existing education system.

Keywords: Indian Education, NEP 2020, Higher Education Institution (HEI), Digital Education

I. INTRODUCTION

The National Policy on Education (NPE) is a policy developed by the Government of India to promote education among Indians. The policy extends from primary school to college education in rural and urban areas of India. The first NPE was issued by the Indian Government in 1968 by Prime Minister Indira Gandhi, the second by Prime Minister Rajiv Gandhi in 1986, and the third by Prime Minister Narendra Modi in 2020. The National Education Policy 2020 (NEP 2020), which was approved by the Union Cabinet of India on July 29, 2020, sets the goal for India’s future education system. The new education policy replaces the previous National Education Policy (1986). The policy is a comprehensive framework for basic education, higher education, and vocational training in both rural and urban India. The policy aims to transform India’s education sector by 2021. The language policy at NEP is a comprehensive guide and advisory to nature, and it is up to states, institutions, and schools to decide how to use it.

NEP 2020 aims to increase the use of national education from about 4% to 6% of GDP as soon as possible. (Nand, 2020) Quality higher education must aspire to develop persons who are exceptional, intelligent, well-rounded, and creative. It must enable a person to study one or more specialized areas of interest in-depth and develop character, ethical and constitutional values, intellectual curiosity, scientific temper, creativity, service spirit, and 21st-century skills in a variety of fields, including sciences, social sciences, the arts, humanities, languages, personal, technological, and vocational subjects. The new education policy is making significant changes to the current system, most notably: universities and colleges mixed in different sectors, with or without one district; revision of student curriculum, pedagogy, assessment, and support for advanced student knowledge; establishment a National Research Institute to support peer-reviewed work by peers; and successful investment courses at universities and colleges. The main issues confronting the Indian higher education system are enforced qualification separation,
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II. OPERATIONAL DEFINITIONS OF TERMS

Higher Education: According to Aristotle, “Education is an ornament of prosperity and a refuge in adversity.” In general, “higher education” refers to university-level education. It provides a variety of certifications, ranging from Higher National Diplomas and Foundation Degrees through Honours degrees and, at a higher level, Masters and Doctorate programs.

Digital Education: Digital education is the introduction of the use of modern technology and digital tools to assist in the development of teaching and learning. TEL, digital reading, and e-learning are other terms for Technology-Enhanced Learning (TEL). Digital education is the future of education through digital technology and gadgets.

III. REVIEW OF LITERATURE

The researcher reviewed several research journals, research abstracts, and academic papers and presented his findings as reviews.

K. Jahan, and D. Selvarani (2015) in their paper “Higher Education in India: Problems and Challenges”, published at the International Conference on Humanities, Literature, and Management, saw more understanding of the current situation in the country’s higher education system and its development path, given the opportunities and challenges of the process under consideration. This paper finds it extremely important to raise awareness of the many concerns that need to be addressed by national and international stakeholders.

Current research provides insight into the funding systems and enrolment aspects of higher education in India. This paper has highlighted the key issues affecting service delivery gaps, registration, private business retention, etc., and suggested that the situation in the higher education sector was not favorable. The goal of India’s public higher education policy should be to maintain high levels of education in line with advances in the fields of knowledge and technology.

Kumar (2021) in his paper “New Education Policy (NEP) 2020: A Roadmap for India 2.0”, NEP 2020, studied India’s vision 2.0 on the overall transformation of the education system to meet the challenges of the 21st century. His research is based on secondary data and examines nature. The findings are based on a systematic review of available literature. It has been found that one of the main objectives of NEP 2020 is to increase student enrolment in all educational institutions, such as primary school, higher education, and higher education, by 2030. His research is a preliminary review of the policy document and can be considered as the basis for the future. a study with research data to study the impact of NEP after its implementation. His research has shown that the National Education Policy 2020 will play a key role in transforming the old education system in a holistic way. NEP 2020 is based on the assumptions of quality, independence, debt, fairness, savings, and an all-inclusive multidisciplinary approach.

In their paper “Indian Higher Education System: Challenges and Suggestions,” published in the Electronic Journal for Inclusive Education, Sahil Sharma and Purnendu Sharma (2015) investigate the major challenges India currently faces in higher education and the steps the government has taken to address these challenges. Researchers have presented the current state of India in the field of higher education. The researchers suggested that to improve the higher education system, there was a need to improve teaching, build relationships between research and teaching, and facilitate the integration of higher education institutions, research institutes, and industries.

IV. OBJECTIVE OF THE STUDY

The main purpose of this study was to examine the “Digital Initiatives of New Education Policy 2020 on Higher Education in India.”

V. SIGNIFICANCE OF THE STUDY

The paper concentrates on the need for the country’s new National Education Policy 2020 to be developed. The New National Education Policy demonstrates the adjustments that can be made to India’s higher education system.

VI. RESEARCH METHODOLOGY

This research is a descriptive study. The necessary secondary data was collected from various websites including those of the Government of India, magazines, journals, other publications, etc. This data was then analysed and reviewed to arrive at the inferences and conclusions.

Research Questions

The following questions are framed for the benefit of the study.

1. What is the scope for higher education in NEP 2020?
2. What are the changes in higher education in NEP 2020?
3. What are the digital strategies of higher education in India?

VII. DISCUSSION

A. Scope for Higher Education in NEP 2020

Multiple higher education regulators in India will be merged under the Higher Education Commission of India (HECI) as a single regulator for HEIs. The certification establishments (NAAC and NBA) will be replaced, and a strong National Certification Council (NAC) will be formed. The National Research Foundation would fund research and innovation in higher education. The NEP has established a multidisciplinary education paradigm for higher education institutions. These institutions should have a campus of at least 3,000 students. The deadline for becoming multidisciplinary is 2030, and they intend to have 3,000 students by 2040. (Bhalla & Mamta Rani Agarwal, 2021). Furthermore, these multidisciplinary universities should either focus on research or teaching, and they can become specialized institutions in one of them. Colleges have the option to be independent and offer their degrees, or they may be part of an existing university.

The NEP also discusses strategies to promote student enrolment in various types of educational institutions. Because GER has been a source of worry in India, the current education policy places a special emphasis on it. The NEP emphasizes a holistic and multidisciplinary teaching approach, and research is now only supported at the UG level. The present policy emphasizes a student’s overall development through cross-disciplinary and outcome-based education.

There is a proposal for a national Academic Bank of Credit to enable flexibility in obtaining degrees and different entry-exit possibilities at all levels of education. Several digital platforms will be launched or modified to encourage online learning and library digitization. Instead of the existing teacher-focused teaching paradigm, a student-focused teaching and learning method will be implemented. The evaluation approach will be changed from choice-based to competency-based. The evaluation and assessment models will also shift from an end-of-semester examination system to a continuous assessment system.

All HEIs will be required to focus on skill development. They must also have counselling centers with counselors to care for students’ mental health. Conventional education is undergoing a significant upheaval as it transitions to a market-driven model. The Indian government intends to create world-class educational institutions and recruit many overseas students. Furthermore, a student’s courses completed at overseas universities will be given weightage and considered equal in India. This will allow students to begin a degree overseas and finish it in India. (NEP, 2020) (2).

B. Higher Education Changes in NEP 2020

When the emphasis is placed on the foundation or roots, it leads to enhanced growth, but at the same time, a higher structure plays an important role because it leads one to a certain understanding. As a result, when it comes to pursuing higher education, one is frequently tormented by different elements such as social and peer pressure, perplexity about subject choices, and a desire for higher-paying employment and admission to reputable universities. Students are often lagging in terms of percentage and knowledge. So here, NEP comes up with a few changes that break these ideas and allow students to grow:

1. Creating a Multi-Disciplinary Universities and Colleges System: It is critical to break down stereotypes and prevent unpleasant behaviours such as ragging in universities and colleges. Because these are educational shrines where all students must be treated fairly with an equal distribution of possibilities.

2. Heading towards a Liberal Undergraduate Education: It is past time to take a broader look at education. It does not have to be limited to a specific subject such as science, commerce, or the like.

3. Encouraging Faculty and Institutional Autonomy: The NEP would like to make institutions and staff independent so that they can develop a sense of responsibility, creativity, and regulation in their work.

4. Formation of a National Research Foundation (NRF): The NRF’s major goal is to give financing for research proposals to all institutions in India.

5. Reformed Regulatory System: Some measures are the same as in past policies, but this time more emphasis will be placed on execution, and anyone who does not follow the standards established under the NEP may face severe consequences. (Kamble et al., n.d.)

C. Higher Education in India: Digital Strategies

The digital revolution is causing significant changes in the higher education sector. To promote digital education, each institution takes a different approach. The MHRD has undertaken unique programmes such as SWAYAM (India’s own MOOCs), Swayam Prabha, the National Digital Library (6.5 million volumes), and the National Academic Depository. New Online Education Regulations have been introduced by UGC and regulations have also been adopted for the same.

Online education technology and all digital projects are, soon, capable of revolutionizing the higher education situation. To raise the GRE from 24.5 to 30 by 2020, and for the quality of education to be enhanced, high-quality education opportunities would have to be expanded to an extensive extent. The use of technology in higher education through online education is also essential because of the following factors.
Due to lower infrastructure costs and a larger student base, online education is cheaper than formal education without compromising quality.

1. Online education is provided directly by the best teachers, ensuring high academic performance.
2. Online education covers the rural-urban gap, as reflected in the reality that India currently has 4.5% of graduates in rural fields compared with 17% in industrial fields. The disparity for women is stronger: 2.2% of women graduate in rural fields, compared to 13% of women who graduate in metropolitan regions.
3. Online learning can improve teen employment rates with a flexible plan that suits current business needs.
4. IT technology usage is anticipated to boost Internet customers by 2021 from 40.9 Cr to 73.5 Cr. This will improve young people’s connection to online courses.
5. Increasing smart phone usage, anticipated to boost from 29 Cr to 47 Cr in 2021, would also promote the use of mobile internet lessons.
6. The high cost of family health care will increase in the future, creating opportunities for additional health care facilities for previously neglected residents.
7. The urgent demand of the work industry for retraining and professional graduation in accordance with industry needs better represents the importance of online training in contributing to lifelong learning.
8. Certainly, the Skill India Mission would involve internet classes to reach out to many unskilled or semi-skilled people to assist them in improving their abilities.

Education through digital assignments offers optimism. It is open to everyone, it is inexpensive, it can solve the shortage of high-quality professors, and it can boost higher education plan enrolment. Digital teaching methods provide lifelong learning opportunities.

The initiatives launched by the MHRD are:

1. **Study Webs of Active Learning for Young Aspiring Minds (SWAYAM):** SWAYAM is an indigenous IT Massive Open Online Courses (MOOCs) platform to provide the highest quality education that can be obtained by anyone who is using the IT scheme at anytime and anywhere. SWAYAM would allow learners in any portion of the country to attend courses provided by the country’s finest educators, thus making it possible for everyone to have access to a first-class education.
2. **SWAYAM Prabha:** The 32 Educational DTH Channels: SWAYAM PRABHA developed 32 DTH channels on 24x7 platforms as a stepping stone for quality teaching programs. There will be new features for at least four hours a day that will be updated six times a day, allowing the participant to choose his or her leisure time.
3. **National Digital Library (NDL):** MHRD has approved an IIT project in Kharagpur under NMEICT entitled “Development of India’s National Digital Library, Towards National Assets.” The National Digital Library in India aims to collect, preserve, and disseminate our country’s complete educational production and to provide internet connectivity from college to graduate level, including technical education. More than 72 digital lakh jokes are accessible through the NDL. The content covers almost all of the key educational disciplines as well as all of the student’s critical focus, from the academic phase to the largest educational phase, including full-time students.
4. **National Academic Depository:** The National Academic Depository (NAD) is the Department of Human Resource Development (MHRD) that assists in the digitalisation, retention, access, and monitoring of academic awards by educational institutions. NAD is a unique, innovative, and ongoing programme under the theme “Digital India” to achieve the digital potential of educational records. This affects the lives of Indian youth and empowers them with digital, online, trusted, and certified certificates that are always securely accessible. NAD pledges to eliminate difficulties and inefficiencies in the collection, storage, and presentation of visual documents.
5. **e-Shodh Sindhu:** More than 15,000 electronic journals and electronic books around the world are produced through the e-Shodh Sindhu project and made available to all higher education institutions. By using the digital mode, allows access to the world’s leading educational resources. The system is operated by INFLIBNET in Gandhinagar, Gujarat.
6. **Virtual Labs:** It is a website or interactive learning software relying on actual event simulations. It enables learners to investigate a subject by linking and contrasting distinct situations, to stop and replay reflective and note-taking applications, and to gain practical internet testing knowledge. More than 205 virtual laboratories in nine fields of Engineering & Science, involving approximately 1515 experiments, are functional and are presently accessible to more than six lakh learners.
7. **e-Yantra:** A NMEICT programme MHRD project called “e-Yantra” is being introduced to integrate robotics into engineering education with the goal of involving learners through interesting practical implementation of mathematics, computer science, and engineering values. In 100 schools, e-Yantra was introduced.
8. **Campus Connectivity:** NMEICT provided the establishment of 1 GBPS university access and 20 512 Kbps broadband access to schools. A maximum of 600 universities have been linked via 1 Gbps of optical fiber; 22026 universities have been linked at 10 Mbps of bandwidth so far. Wi-Fi facilities have been set up by all IITs, IIMs, and NITs. At central universities, the method of building the optical fiber and providing Wi-Fi is presently ongoing.
9. **Talk to a Teacher:** Talk to a Teacher created by IIT Bombay, is an effort of the National Education Mission.
through ICT, financed by MHRD to provide unlimited entry to a few chosen graduate and postgraduate classes conducted by renowned professor representatives and researchers at IIT Bombay. It utilises Amrita University’s A-View cooperation tool to provide the professors with virtual classrooms across the nation. These classes are completely accessible at low bandwidth on a personal computer or laptop with a headphone jack and an internet connection. It is not necessary to register because it has no evaluation or certification method. To date, under this initiative, more than 80,000 professors have been trained, comprising a synchronous distribution of IIT Mumbai and IIT Kharagpur classes.

10. e-Acharya: The E-Acharya, also known as NMEICT’s “Integrated e-Content Portal,” is the formal database of NMEICT e-content. All information generated under NMEICT is placed on this portal system at the INFILIBNET Center Gandhinagar to apply fundamental principles of digital material conservation, enforce normal metadata schemes of distinct kinds for digital material, and guarantee long-term accessibility. The e-Acharya is supported by a solid 24X7 Data Center, which is incorporated with NMEICT, the cloud network established by the IIT-Delhi at the NIC/NKN Data Center and called “Baadal.” The MOOCs generated under NMEICT are also downloaded to e-Acharya.

11. E-Kalpa: The initiative on “Creating Digital Learning Environments for Design”, also called E-Kalpa, is funded by India’s MHRD as a portion of the National Information and Communication Technology Mission in Education.

12. The Free and Open-Source Software for Education (FOSSEE): It encourages the use of Floss instruments to enhance educational performance. The IIT-sanctioned FOSSEE scheme promotes the use of open-source software in academic organizations (http://fossee.in). To guarantee that commercial software is substituted by similar FLOSS instruments, the FLOSS instruments are used in multiple operations.

13. e-Vidwan: Vidwan is the major profile database of scientists, researchers, and other staff employees employed at major educational organizations and other learning and study organizations in India. It offers significant data on the context of the expert, email number, knowledge, academic journals, abilities, achievements, identification of the scientist, etc. INFILIBNET created and retained the database through ICT (NME-ICT) with economic assistance from the National Education Mission.

14. BAADAL: BAADAL is cloud orchestration and virtualization leadership software created and retained by IIT Delhi and launched by MHRD under the NMEICT system. It guarantees optimum infrastructure usage and accelerates the growth of eGov apps for educational requirements.

15. Global Initiative of Academic Networks (GIAN): The Union Ministry of Human Resource Development (HRD) introduced a Global Academic Network Initiative (GIAN) scheme to enhance higher education performance in India. The GIAN Scheme seeks to improve the performance of the country’s higher education through global cooperation. Academics will be divided into 13 disciplines, and 352 courses will be studied under this system, which will be implemented in 68 domestic organizations.

16. National Institutional Ranking Framework (NIRF): The National Institutional Ranking Framework (NIRF) is a methodology adopted for ranking higher education organizations in India by the Ministry of Human Resource Development (MHRD), the government of India. The Framework was approved by the MHRD and launched on September 29, 2015, by the Minister of Human Resource Development. The classification parameters are Teaching Learning and Resources, Research and Professional Practices, Graduation Outcome, Outreach and Inclusiveness, and Perception.

17. Impacting Research Innovation and Technology (IMPRINT): IMPRINT is the first Pan-IIT+IISc combined effort of its kind backed by MHRD to tackle the significant science and engineering problems that India must tackle and promote to facilitate, empower, and embolden the country for inclusive growth and self-reliance. IMPRINT offers an overall view that directs studies into predominantly culturally appropriate fields.

18. SAKSHAT: A One Stop Educational Portal: The gateway, created by IGNOU’s eGyanKosh, was introduced in October 2006 by India’s then President, Dr. APJ Abdul Kalam. It is designed to promote free-of-cost lifelong learning for learners, educators, and those in jobs or in search of understanding. There are five operational modules: e-books, e-journals, electronic repositories, and digital libraries on the web.

19. Atal Ranking of Institutions on Innovation Achievements (ARIIA): It is a project of the Government Development Ministry of Human Resources (MHRD). From India, all the major institutions of higher learning and universities in India are systematically ranked among students and faculty with indicators linked to “New Development and Entrepreneurship Development.”

20. Digi Locker: It is one of the key initiatives under the Digital India Program. The external website opens in a new window. A beta version of the same has already been released by the Department of Electronics and Information Technology, Govt. of India. The Digital Locker is aimed at minimising the use of physical documents and enabling the sharing of e-documents across agencies.

21. The National Program on Technology Enhanced Learning (NPTEL): NPTEL is a curriculum building exercise aimed at providing learning materials in science and engineering by adhering to the syllables of the All-India Technical Education Council and the
slightly modified curricula of major affiliated universities.

22. **Open-Source Courseware Animations Repository (OSCAR):** Project OSCAR (Open-Source Courseware Animations Repository) provides a repository of web-based interactive animations and simulations referred to as learning objects (LOs). These learning objects cover subjects in science and engineering at the college level and mathematics and science at the school level. These learning objects can be viewed, run, and downloaded by students and teachers.

23. **Spoken Tutorial:** The Spoken Tutorial Project is the “Talk to Teacher” initiative of the National ICT Education Mission launched by MHRD, India. Spoken Tutorial is a multi-award-winning educational content portal. Here you can learn about a variety of Free and Open-Source software on your own. This project is being developed at IIT Bombay (K., 2021).

**VIII. CONCLUSION**

The NEP 2020 initiative aims to revitalise higher education in India. It will make use of international community cooperation and experience. Furthermore, higher education given in Indian universities and colleges under NEP 2020 will use ICT to meet the needs of education in the new normal post-COVID age. Continuing with an outmoded educational system is pointless. To meet the global need for skilled labor, the Indian government would need to make significant reforms to higher education curricula. As a result, implementing NEP 2020 will be a daunting task. The policy is committed to bringing about change and development. Higher education institutions (HEI) will be subject to one regulator, as opposed to the current system of minority authorities. There will be a liberal autonomy environment to foster academic independence, research breadth, and an emphasis on innovation. Foreign institutions will be able to establish campuses in India, while Indian universities will not have any difficulties in establishing campuses abroad. (Chandra, 2021). By 2020, NEP 2020 will have significantly increased skillling in India by providing students with several entries and exit options and allowing them to continue their education after taking a break for work. Overall, NEP 2020 is a progressive document, with a good grasp of the existing socioeconomic landscape and the promise of facing future problems. Well, no policy will bring fruit if it is not implemented properly. In any case, this idea appears to be a well-thought-out and genuine attempt to reform the Indian educational system. This approach emphasizes the incorporation of professional education within HEI for skill development and job creation. The policy introduces a wide range of adjustments and reads primarily as a progressive text, with a firm grip on the existing socioeconomic landscape and the prospect of future unpredictability. Education for a new generation of learners must essentially deal with the increasing dematerialization and digitization of economies, which necessitates an entirely new set of competencies in order to keep up. This appears to be an even more important requirement now, as the epidemic has accelerated the trend toward digitisation and disruptive automation. The new education policy has a commendable vision, but its strength will be determined by its ability to effectively integrate with other government policy initiatives such as Digital India, Skill India, and the New Industrial Policy, to name a few, to effect a coherent structural transformation. There is also a need for greater evidence-based decision-making to react quickly to developing transmutations and disruptions. (Anu, 101 C.E.).

The NEP has included reassuring provisions for real-time evaluation systems as well as a participative monitoring and review framework. Instead of anticipating a new education policy every decade to reflect a movement in the curriculum, this will enable the school system to constantly improve itself. This will be a tremendous feat in and of itself. The NEP 2020 represents a watershed point in higher education. Furthermore, the NEP 2020 prepares certain young, optimistic understudies to be equipped with the privileged skill set. Its proper implementation will be critical to its success. It will be carried out to grade V. With NEP 2020, it is projected to revolutionize the education scenario in the following years, and this will undoubtedly drive India’s claim to become a superpower in the future. Every year, 8,934 students commit suicide in India because grades have become a very important part of the education system and have left a person far from his or her true potential. The New Education Policy 2020 demonstrates that education is much more than cramming courses, meeting deadlines, and getting grades; the genuine purpose of education is to acquire knowledge, skills, and values, and make progress in the field in which one discovers one’s own interests. There is no doubt that if the full policy is used properly, it can take Indian education to the next level. Although some of its objectives are not clear, we cannot really judge this until its written plans turn into actions. We can only hope for the best results. It is built in memory of the full growth and happiness of the students.

**REFERENCES**


