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DIGITAL APPLICATION OF NEP 2020 IN HIGHER EDUCATION: AN OPEN UNIVERSITY CASE

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ABSTRACT

Digital application is an approach to teaching that uses technology to improve and speed up the learning process. It entails delivering instructional information, involving students, and fostering interactive learning experiences through digital technologies and resources. The study's importance stems from its capacity to provide valuable insights for evidence-based decision-making, policy development, and implementation tactics to achieve the goals delineated in NEP 2020 and cultivate a practical digital application in an educational environment. The study identified several stages of digital application in this article, the main initiatives related to digital application at the ODL higher education level, and the specific justifications for the results of these activities by NEP 2020 for Open & Distance Learning. A qualitative study design and primary and secondary data sources have been used. Several efforts, including NKN, NPTEL, NMEICT, e-Shodh Sindhu, SWAYAM, MOOC, NDLI, etc., aim to promote the use of ICT in higher education. Furthermore, a Case study of the NSOU-ODL showed that they have successfully implemented a number of the NEP-2020's suggested initiatives, including digital libraries, blended learning, open educational resources, credit transfer, online assessments, learning management systems, massive open online courses, active learning websites for aspiring learners, and digital infrastructure. Findings explored that the digital application has great promise for transforming education; it is crucial to guarantee that it is accessible to all students, irrespective of their situation or socioeconomic status.

Keywords: Digital Application, NEP 2020, ICT, Digital Libraries, Blended Learning

1. INTRODUCTION

Digital application is an approach to teaching that uses technology to improve and speed up the learning process. It entails delivering instructional information, involving students, and fostering interactive learning experiences through digital technologies and resources. Online classes, virtual classrooms, instructional applications, multimedia presentations, and other digital platforms fall under this category. Compared to traditional classroom-based education, this learning has several benefits. It gives students access to a wide range of materials and knowledge, allowing them to investigate various viewpoints and get information from many sources. Because students can choose materials that suit their interests and learning

styles and advance at their own pace, enabling personalised learning experiences. It has been demonstrated that incorporating digital technologies into the classroom increases motivation and student involvement. Gamification and simulations are two examples of interactive learning activities that can enhance student engagement and retention by making learning fun and engaging. The National Education Policy (NEP) 2020 is a comprehensive framework for transforming India's educational system Ministry of Education, Government of India (2020). This policy aims to cultivate critical thinking, creativity, and the holistic development of students while promoting an egalitarian and inclusive approach to education. The NEP places significant emphasis on integrating digital applications and using technology to enhance teaching and learning experiences Ministry of Education, Government of India (2020). It recognises the potential of online resources and digital infrastructure to broaden access to high-quality education, particularly in rural regions.

To support personalised and self-directed learning, the NEP advocates developing digital resources, including e-books, e-libraries, and e-courses Ministry of Education, Government of India (2020). Furthermore, it encourages incorporating technology-enabled innovations such as augmented reality, virtual reality, and artificial intelligence to create engaging and immersive educational experiences. The NEP underscores the importance of training teachers in digital pedagogy and the effective integration of technology into teaching methodologies Ministry of Education, Government of India (2020). It advocates for providing digital infrastructure in educational institutions, including digital devices and high-speed internet access. Following the implementation of the NEP, over 70% of Indian universities have adopted digital platforms. The overarching goal of the NEP is to establish a technology-enabled, learner-centred educational framework that promotes the development of digital citizenship, digital literacy, and digital skills among students Ministry of Education, Government of India (2020).

Several universities in India have successfully implemented digital policies under NEP 2020, showcasing innovative approaches to higher education. Delhi University has embraced NEP 2020 by integrating multidisciplinary learning and digital education platforms. The university has focused on equity and inclusion, ensuring students from diverse backgrounds benefit from digital advancements Singh (2023). HNB Garhwal University, a central university in Uttarakhand, has been proactive in implementing NEP 2020, even contributing to its finalisation. It established an implementation committee to oversee digital education strategies and translated the NEP document into the Garhwali language for local accessibility. The university has emphasised skill development, multiple entry-exit options, and field-based studies (https://hnbgu.ac.in/sites/default/files/2023-10/NEP%20implementation-%20Road%20traversed%20by%20the%20University.pdf). Furthermore, the Ministry of Education has documented success stories of NEP 2020 implementation across various institutions. Universities have adopted AI-driven learning, blockchain-based credential verification, and virtual internships to enhance digital education (https://www.education.gov.in/success-stories-and-best-practices-nep-2020-implementation). These examples highlight how universities leverage technology, inclusivity, and innovation to align with NEP 2020's vision.

2. KNOWLEDGE BACKGROUND

Throughout the 19th century, face-to-face instruction, textbooks, and chalkboards were the mainstays of the Indian educational system NCERT (n.d.).

Audio-visual aids like overhead and film projectors were not employed in schools until the early 20th century Kumar (2016). ICT integration in education started in the late 20th century with the introduction of computers Kumar (2016). To make learning more dynamic and engaging, the National Council of Educational Research and Training (NCERT) created software for various courses NCERT (n.d.). The Indian government has launched several programs in the twenty-first century to encourage ICT integration and digital literacy in the classroom. The incorporation of ICT tools into teaching and learning processes was stressed in the National Policy on ICT in School Education (2012). Schools increasingly use "smart classrooms," furnishing multimedia content, projectors, and digital whiteboards Government of India (2012). With online courses, instructional videos, interactive simulations, and collaborative tools available, online platforms, learning management systems, educational apps, and e-learning portals have grown in popularity Kumar (2016). The COVID-19 epidemic significantly expedited the shift toward remote learning and virtual classrooms using ICT in education NCERT (n.d.).

Sarkar (2023), in his study on "Online and Digital Education in the Light of National Policy on Education 2020", proposed that research on ICT-based educational programs has to be expanded and improved to address the challenges of providing high-quality education to everyone now and in the future. In addition to enhancing young proficiency in the native language, this approach heavily emphasises the Indian educational system, language culture, and values. “Education in India: Digitisation towards NEP-2020 Policy” by Rudrawar and Ratnaparkhi (2023) discovered their ideas by examining how the government introduced the National Education Policy (NEP), which emphasises that rapid development of widespread education depends on digitalisation. Additionally, it emphasises using edtech to advance education, especially in rural regions. This primarily aims to provide high-quality education nationwide (S. Arora in New Education Policy 2020 and Online Education, 2023). The 2020 policy framework provided several significant modifications to the Indian educational system. The current analysis focuses on the NEP-2020 programs that are fundamental to online education. The strategy's promotion of the production and dissemination of top-notch digital content for elementary, secondary, and tertiary education is described in the article. The use of E-Learning and Integration with NEP-2020 by Kumari and Tiwari (2023) showed that the goal of NEP 2020 is to provide the policy base for a new India. It aims to revolutionise India's educational system so everyone may receive a top-notch education, making the country a global knowledge superpower. Through NEP 2020, we can integrate e-learning into our educational system, revolutionising the field and enabling our students to keep up with the educational systems of industrialised nations. An extensive analysis of Digital applications within the framework of NEP 2020 was carried out by Das (2023), who stated that all around the nation, education is being revolutionised by the Digital India Campaign to become more technologically driven. Digital applications will significantly influence the educational system's empowerment and results (The Impact of Digitalisation of Education with NEP-2020 on Life Quality by Vishwakarma and Singh (2023). The results demonstrated how NEP 2020's digitalisation significantly and favourably affects people's quality of life. The NEP 2020 policy is a well-liked education strategy for reforming education and for a brighter future for society. However, because it requires appropriate, flexible lifelong learning and training, its envisaged implementation in digitalisation would be highly challenging. A brief review of National Education Policy 2020 and Online and Digital Education was done by Sheergugri and Raj (2022). The Education Policy 2020 is designed to give all citizens access to high-quality education, positioning the country as a prosperous and

dynamic knowledge society. This strategic initiative is expected to transform India's educational framework significantly, rendering it more inclusive, progressive, and aligned with contemporary needs. In their work titled "Digital Education: Ensuring Equitable Use of Technology," Wadekar et al. (2022) argue that addressing the digital divide is essential; without this, the potential advantages of online and digital applications cannot be fully realised. Equitable treatment of equity concerns is crucial when using online and digital education technology. This essay explores the current state of digital education in the Indian Republic, the various barriers to and facilitators of acquiring digital education, and the need for equal access to technology to close the digital divide. Research on the impact of the 2020 education policy NEP (2020) on universities has even found that it gives some ambitious young students an advantage in skills development. The smooth execution is crucial to its success. There is little doubt that NEP 2020 will solidify India's status as a future superpower by radically altering the educational system in the years to come. Technology integration in education in NEP-2020 by ICT (2023) illustrates technology in education and proposes incorporating technology into the classroom. Moreover, it focuses on the difficulties in implementing NEP 2020's suggestions about using technology in the classroom.

3. DIGITAL APPLICATIONS- TAKEAWAYS FROM NEP 2020

Per the 2020 Education Policy, research on digital applications is quite important. NEP 2020 aims to revolutionise the Indian education system by incorporating digital tools and technology to enhance learning outcomes. We can better understand the implications, difficulties, and opportunities of digital usage by researching the recommendations of NEP 2020 in digital applications. It can assist in determining the optimum methods, approaches, and materials required to support smooth online learning environments. Additionally, it can highlight potential obstacles and injustices that may surface during the shift to digital platforms and provide guidance for creating interventions and policies to deal with them. Examine the efficacy of different Digital application platforms, tools, and approaches, including virtual reality, educational apps, online courses, and adaptive learning systems. It can offer perceptions on how these technologies can improve student learning results, individualised learning, and student engagement. Additionally, assess how prepared and capable educational institutions, teachers, and infrastructure are to adopt Digital applications successfully. It can provide advice on infrastructure development, teacher preparation, and digital literacy initiatives to create a favourable atmosphere for digital education. The study's importance stems from its capacity to provide valuable insights for evidence-based decision-making, policy development, and implementation tactics to achieve the goals delineated in NEP 2020 and cultivate an effective Digital application environment.

4. METHODOLOGY

The research employed a qualitative design supported by primary and secondary data sources. The study has tried to showcase various viewpoints, theories, and empirical knowledge. The majority of the research work has involved scanning and analysing the NEP-2020 document and other public material related to the subject. The fallout consequences of technology initiative clauses have been found using the Delphi technique. Finally, the study initiated a case study of Netaji

Subhash Open University, Kolkata, to justify the research findings. It has proceeded with the following objectives -

1) To explore the various stages of digital application as outlined in NEP 2020.
2) To discuss the major initiatives on digital applications in Open and Distance Learning (ODL) in the Higher Education sector.
3) To delineate the outcomes of digital application initiatives by NEP 2020 for Open and Distance Learning.

5. UNFOLDING THE FOLDS

The study has commenced according to the objectives-

Objectives 1: To explore the various stages of digital application as outlined in NEP 2020.

Three critical areas of focus by the NEP 2020 Committee regarding Digital application are identified as follows:

1) Usage and Integration of Technology
2) Digitalised Learning: Ensuring equity in technology usage
3) Initiating a separate unit for developing a digitalised educational infrastructure of a global standard

The said policy recommended specific strategies that seek to integrate technology into education at all levels appropriately:

- Enhance instruction, learning, and assessment. Encourage teacher preparation and ongoing professional development.
- Enhance underprivileged groups' access to education
- Simplify educational administration and management, and innovatively plan the admission and assessment procedures.
- Educational software should be created and accessible to all educators and learners.
- Specially-abled learners can access a comprehensive selection of instructional software available in all Indian languages.
- All digital documents about schools, instructors, and students will be kept up to date by the National Repository of Open Educational Resources (NROER).

5.1. USAGE AND INTEGRATION OF TECHNOLOGY

To provide a platform for the unfettered exchange of ideas on how to use technology to enhance planning, administration, evaluation, and learning in higher education and the classroom, the National Educational Technology Forum (NETF), an independent organisation, will be founded. It will be able to do the following functions:

1) Offer impartial, fact-based guidance on technology-based interventions to federal and state government agencies.
2) Develop institutional and intellectual capabilities in educational technology. c) Identify areas of strategic interest.
3) Clearly state new lines of inquiry and creativity

4) To get feedback from national and international educational technology academics, entrepreneurs, and practitioners, arrange several regional and national conferences, workshops, etc.

All states, along with the NCERT, NIOS, CIET, CBSE, and other organisations and bodies, shall continue to generate e-content for teaching and learning in all regional languages. Additionally, it will be posted on the DIKSHA website. Through e-content, this platform can be used to support teachers' professional development. CIET will be reinforced to support and grow DIKSHA and other educational technology initiatives. Technology-based learning systems, like SWAYAM or DIKSHA, will be more seamlessly incorporated into higher education and schools. They will also include user feedback and ratings, allowing content creators to produce high-quality, easily navigable information. The National Research Foundation will start or increase research on artificial intelligence (AI) in response to MHRD's official acknowledgement of the technology. NRF will take a three-pronged approach to AI: a) improving core AI research, b) creating and implementing application-based research, and c) expanding international research that uses AI to address issues in global agriculture, healthcare, and climate change.

1) Disruptive Technology: Contributions to the Curriculum in Schools

As disruptive technologies emerge, education and ongoing training will contribute to increasing public understanding of their possible disruptive impacts. Disruptive technologies, like those highlighted by NETF/Ministry of Education, will be discussed in class as part of studying current events and ethical issues. Appropriate teaching and discussion materials will also be developed for continuing education. It is anticipated that disruptive technologies will alter our way of life and how we instruct pupils. As a result, education will give priority to topics like clean and renewable energy, water conservation, sustainable agriculture, environmental preservation, and other green projects.

2) Disruptive Technology: Contributions to Post-secondary Education

- Universities will try to provide PhD and Master's degrees in professional domains like law, healthcare, and agriculture, multidisciplinary subjects like AI + X and core areas like machine learning.
- For quick adoption, HEIs may combine online learning with conventional instruction in undergraduate and vocational programs.
- They may create and distribute courses in these fields using various online platforms. The SWAYAM platform, initiated by Govt. of India, could be a good example.
- Colleges and universities may also provide specialised education in low-skilled jobs essential to the AI value chain, including data annotation, voice transcription, and image classification. Along with teaching students' Indian languages in the classroom, we can work to improve natural language processing for the vast array of Indian languages spoken today.

5.2. DIGITALISED LEARNING: ENSURING EQUITY IN TECHNOLOGY USAGE

The current pandemic proves that the NEP requires the development of alternative, high-quality educational methods when in-person training is not practical. Among the several necessary actions to ensure accessible digital education is developing audiovisual interfaces that allow for two-way

communication during online courses. Another option is to use telecasting and broadcasting in multiple languages to ensure maximum reach of the study materials in remote areas without digital infrastructure.

1) Digital devices and Internet connection across households in India

Table 1

Table 1 Usage and Accessibility to Digital Devices and Internet Connection Across Households (2017-18)			
Access to ICT	**Rural**	**Urban**	**Total**
Households having Digital devices	**4.40%**	**23.40%**	**10.70%**
Households with an Internet connection	**14.90%**	**42.00%**	**23.80%**

Source: Household Social Consumption on Education (2017-18), Ministry of Statistics and Programme Implementation (2020), PRS.

It should be noted that computers include desktops, laptops, notebooks, and tablets, not necessarily smartphones.

2) Digital device or Internet usage by persons in the age group of 5-14 in India

Table 2

Table 2 Digital Device or Internet Usage Ability Across Persons in the Age Group 5-14 (2017-18)			
ICT Usage	**Rural**	**Urban**	**Total**
Ability to use a Digital device	5.10%	21.30%	9.10%
Ability to use the Internet	5.10%	19.70%	8.80%

Source: Household Social Consumption on Education (2017-18), Ministry of Statistics and Programme Implementation (2020), PRS.

It should be noted that the computer skills in Table 2 entail performing various operations, including sending emails, copying and moving files and folders, and file transfer. The ability to use the Internet entails website browsing and being habituated to using emails and social networking sites.

5.3. INITIATING A SEPARATE UNIT FOR DEVELOPING A DIGITALISED EDUCATIONAL INFRASTRUCTURE OF A GLOBAL STANDARD

- The Ministry of Education recommends initiating a separate unit to develop a global standard of digitalised educational infrastructure. This unit would orchestrate digital infrastructure, e-content, and capacity building to address digital teaching-learning.
- An active ecosystem is highly recommended to help India adapt to the fast-paced technological developments and find answers to its problems of diversity, scale, and equity.
- This dedicated unit will include experts from various sectors, such as administration, management, digital pedagogy, evaluation, and assessment.

Objectives 2: To discuss the major initiatives on digital applications in Open and Distance Learning (ODL) in the Higher Education sector.

The 2020 policy recommends the following digital initiatives for digital applications. By 2035, the goal is to elevate the Gross Enrolment Ratio (GER) in postsecondary education to at least 50%. The goal is to enhance the GER in higher education, encompassing vocational programs, from 26.3% in 2018 to 50%. The GER is projected to climb to 50% due to enhanced open and remote learning opportunities. Implementation of credit-based MOOC recognition, research support, enhanced student services, online courses, and digital repositories will assure comparability with premier programs.

The Government of India has launched several initiatives to facilitate the integration of information and communication technologies (ICT) in higher education. These initiatives include the National Knowledge Network (NKN), the National Program on Technology Enhanced Learning (NPTEL), the National Mission on Education through ICT (NMEICT), e-Shodh Sindhu, the Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM), Massive Open Online Courses (MOOCs), and the National Digital Library of India (NDLI). The relationship between government bodies and higher education institutions is critical, as governments provide funding and support to ensure the efficient operation of these institutions. The National Education Policy 2020 has introduced a variety of measures aimed at significantly improving the overall teaching and learning processes in the sector.

Figure 1

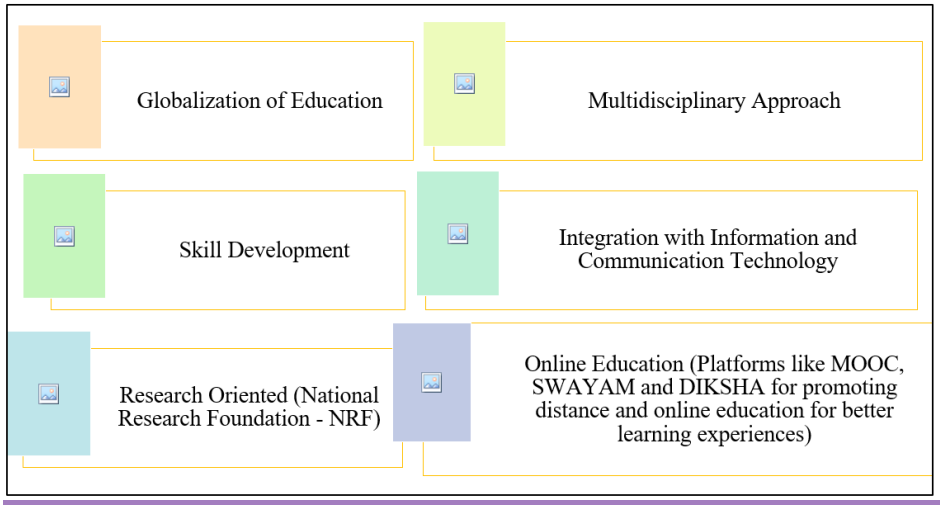

Figure 1 Recommended Policy Aims for Digital Application

Figure 2

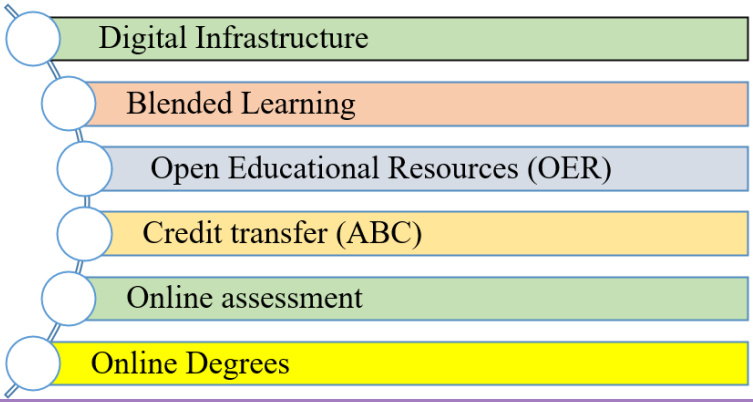

Figure 2 Elements of NEP 2020 Related to Online Education

Figure 3

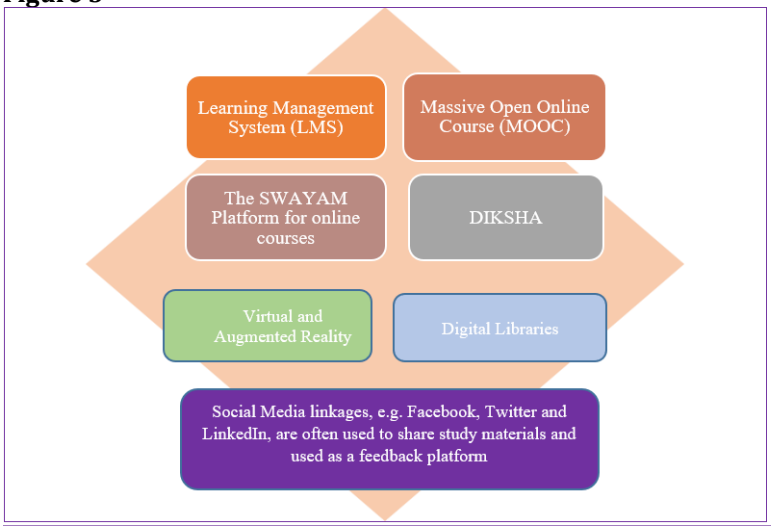

Figure 3 Digital Learning Tools in NEP 2020
Source: Arora (2023)

1) Developmental aspects

- The DIKSHA Platform is supposed to facilitate the professional updatation and upgradation of teachers.
- The integration of DIKSHA/SWAYAM across the secondary and higher education system will be enhanced.
- Encourage and broaden the reach of DIKSHA and other educational technology initiatives.
- DIVYANG students can access a comprehensive selection of instructional software available in all Indian languages.
- E-content that is uploaded to the DIKSHA platform for education and learning.
- Tools that are suitable for the effective integration of e-content into instruction
- The location of students' practices.

Objectives 3: To delineate the outcomes of digital application initiatives by NEP 2020 for ODL.

The study is a humble attempt to rediscover the applications of various digital priorities enshrined by the 2020 policy in Higher Education. An in-depth study of Netaji Subhas Open University, an open university located in Kolkata, West Bengal, as a case, has been conducted to substantiate the study and justify the research. The dimensions of the Case are presented in a tabular form, which are as follows:

Dimensions	Themes	Initiatives for ODL at the Higher Education level
Elements of NEP 2020 Related to Online Education	Digital Infrastructure	Augmented NSOU-LMS, Inclusive website features, videoconferencing units at HQs and RCs, CCTV installed at all campuses, Wi-Fi-enabled campuses, Computer Labs in RCs, e-corner in the central library at Kalyani RC, Digital resources/e-catalogue.
	Blended Learning	All degree programs supplement all degree programs with contact classes vis a virtual SLP,

		ECS, and e-tutorials. A CoL-CEMCA-funded collaborative project on the Capacity Building of HEIs on Blended Learning has been conducted successfully for the last three years. Many vocational programs use blended learning strategies.
	Open Educational Resources (OER)	NSOU-OER repository is in Place with its own OER policy and committee to oversee and ensure quality maintenance. All ODL students can access an open platform with open licenses to reuse, revise, remix, retain, and redistribute (5Rs) educational resources through the NSOU OER Repository. Through this, they promote a flexible learning environment for the 210 million Bengali learners globally, enhancing the quality of education and promoting skill development using SLM, Lecture Notes, A&V Lectures, Assignments, etc. They also offer a list of publicly accessible online study materials and tools.
	Credit Transfer (ABC)	NSOU Provides an Academic Bank of Credits to its Students as recommended by NEP 2020. This Supports academic mobility by allowing them to study at any higher education institution in the nation and providing a suitable credit transfer system from one program to another so they can get a degree, diploma, postgraduate diploma, etc.
	Online Assessment	Formative assessment, i.e., the Assignment component of all degree programs, is conducted online via MCQ on a dedicated exam portal.
Tools for Online Education in New Education Policy	Online Degrees	No
	Learning Management System (LMS)	NSOU-LMS has been in place since 2016. Students receive a range of learning support via ICT-enabled services such as e-SLM, AVL (audio-video lectures), NSOU WebTV, and NSOU Web Radio, live chat with academic counsellors and professionals, placement facilities, and an online bookstore with a wide selection of books and materials at extremely low prices.
	Massive Open Online Course (MOOC)	NSOU-MOOCs are available. Based on participation and activity completion, NSOU-MOOCs provide two certification levels: 1) Must participate in at least five discussion forums and pass quizzes. 2) Needs participation in at least five discussion forums and 70% on the assignments.
	SWAYAM (Active Learning Website for Aspiring Young People)	Around 05 MOOCs are developed and offered by the NSOU faculties [Prof. Anirban Ghosh (03) & Dr Papiya Upadhyay (02)]. The university has developed the A&V lectures on module-specific courses.
	DIKSHA	NA
	Virtual and Augmented Reality	Under Process
	Digital Libraries	The university offers a service for reviewing SAGE Publication journals, an online database, and electronic journals and books. Students can also use the university's services to access reputable libraries during business hours.
Development Aspect	Use of social media to share study materials and act as feedback	Social handles like Twitter (NSOU@open) and the Facebook page are in place and functional.

	platforms (Facebook, Twitter, and LinkedIn)	Telegram groups are also created for some programs (optional).
	The DIKSHA Platform will be recording data regarding the Professional development of teachers	NA
	School and Higher education departments will connect to DIKSHA/SWAYAM platforms.	It may be taken up.
	Effective initiatives to be undertaken to expand and promote technology in Education	NA
	Development of various educational software in all Indian languages (majorly spoken) for *DIVYANG* students	NA
	E-content to be uploaded on the DIKSHA platform	NA
	Developing technology for integrating e-contents into teaching-learning	NA
	Students' Practices Place	NA

Open and Distance Learning Institute- Netaji Subhash Open University (NSOU) and NEP 2020 state that digital applications have become increasingly important in modern education worldwide. The efficacy and accessibility of digital applications, however, continue to raise questions, especially in places with poor internet connections and the unavailability of digital devices. The NSOU emphasises the importance of inclusive and equitable digital education, creating online communities to assist students and providing accessible and reasonably priced digital technologies. Effective monitoring and evaluation of digital education initiatives is crucial. It is also important to train teachers in using digital tools. It should be ensured that all students, no matter where they live or how much money they have, can access digital resources and tools. These resources have the potential to transform education.

6. IMPLEMENTATION: FORESEEING THE FUTURE

1) **Suggestions for Policy Framing-** The 2020 policy has emphasised the integration of digital technologies in higher education to ensure quality and inclusive learning. The following suggestions for policy framing could further strengthen its digital applications:
   - Expanding high-speed internet access and digital learning platforms across rural and urban areas is essential for bridging the digital divide.
   - It is imperative to encourage artificial intelligence-driven personalised learning experiences to address the marginalised and specially-abled learners.

- Promoting blockchain technology for secure credential verification, virtual reality for immersive learning experiences, and machine learning for academic assessments is vital for enhancing educational outcomes.
- Implementing mandatory digital literacy programs for educators will significantly improve their ability to effectively utilise technology in the teaching process.
- It is crucial to develop educational resources in multiple Indian languages to ensure inclusivity and accessibility for all learners.
- Establishing robust policies to protect student data and to using the artificial intelligence abiding by the ethical codes.
- Encouraging partnerships among universities, technology companies, and government agencies will drive innovation in the realm of digital education.

2) Windows for Future Research-

- Investigating the impact of AI-driven tools on enhancing student engagement and improving academic performance.
- Analysing the comparative advantages of fully online learning versus blended learning methodologies.
- Examining strategies to ensure equitable access to digital education for marginalised communities.
- Exploring concerns related to data privacy, artificial intelligence bias, and ethical considerations in digital learning environments.
- Assessing the efficacy of game-based learning in increasing student motivation and enhancing knowledge retention.
- Evaluating the long-term viability of digital learning models within the context of higher education.
- Researching the alignment of digital education with industry requirements and its role in bolstering employability.

These research areas can help shape the future of digital education under NEP 2020, ensuring that technology is leveraged effectively at the higher education level.

3) Implementation in Higher Education- Universities can practically implement digital policies under NEP 2020 by focusing on infrastructure, faculty training, and student engagement. The key strategies could be summarised as follows:

- The advancement of digital infrastructure necessitates expanding high-speed internet access throughout campuses. Universities should increase their investment in smart classrooms equipped with interactive digital boards and AI-driven educational tools. They should also aim to create centralised learning management systems (LMS) to facilitate smooth online learning. Training for faculty and enhancing digital literacy should be a compulsory aspect. Digital training sessions for educators should be implemented as required. Faculty members must be motivated to utilise AI-powered teaching resources and adaptive learning platforms. Collaborative research in the field of digital education methods should be encouraged.

- Multilingual digital resources guarantee inclusivity for student-centric digital learning. Therefore, gamified learning experiences and AI-enhanced personalized education approaches should be introduced. Universities could offer virtual internships and collaborate with industries through digital platforms.
- The Universities and national research agencies (for example, the Indian Institute of Social Science Research) should think of creating data privacy policies to safeguard student information. Awareness initiatives regarding the ethical use of AI in education should be organised. Utilising blockchain technology for secure verification of academic credentials could be more effective. Partnerships between the public and private sectors to innovate in EdTech solutions and collaborating with government programs could improve digital accessibility at the ground level.

7. CONCLUSION

The digitalisation process in higher education, as documented by the NEP 2020, has the potential to radically alter the availability and delivery of education. The policy strongly emphasises using digitalised methods and ways of teaching and learning, which can provide learners with more flexible, accessible, and customised learning opportunities. Higher education institutions can use digital tools and platforms to reach a wider audience, regardless of location. People residing in remote regions or unable to travel to conventional classrooms may find this particularly useful. Through engaging and interactive learning opportunities, the digital application of NEP 2020 can enhance education. Using multimedia resources, simulations, virtual labs, and collaborative online platforms, students can become more involved in their education and cultivate analytical thinking and problem-solving skills. In conclusion, through its digital implementation, the policy has enormous potential for a sea change in the arena of higher education.

CONFLICT OF INTERESTS

None.

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None.

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