



Digital Learning in the Context of NEP 2020: A Comprehensive Analysis

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ABSTRACT:

India's National Education Policy (NEP) 2020 has brought about significant reforms and changes to the educational system, with a particular focus on digital learning. The effects of NEP 2020 on digital learning and education in India are examined in this research paper. The article offers insights into the pedagogical changes necessary for effective digital learning, as well as a discussion of the main aspects of NEP 2020 pertaining to digital education, as well as its opportunities and challenges. Additionally, it examines how educational technology fits into the policy's implementation and makes recommendations for how to successfully integrate it. According to the study, policies should prioritize important initiatives like managing network and power outages, preventing unethical behavior, and ensuring a safe online environment. However, there are a number of obstacles that must be overcome when implementing ICT in remote areas, including poor internet connectivity, limited infrastructure, and restricted access to devices. India leads the world in the IT industry as well as other cutting-edge fields like ICT in education. The Digital India Campaign is transforming education across the country into one that is powered by technology. Digital learning is going to be a big part of the educational system's empowerment and outcomes.

Keywords: National Education Policy 2020, Digital Learning, Education Technology, Online Education, Pedagogical Shift

1. Introduction:

We can say that without policy education means without sail a sailor. So it is very important to make a education policy that can be direction to move the system of education smoothly and effectively. In India recent adobe a policy of education that will be change a holistic development each citizen of India and it will be paradigm shift in education sector probably. NEP 2020 focuses all round changes in education system In India. The new education policy is promoted each student's holistic reforms in both academic and others circle. Gross Enrollment Ratio in school education sector will reach 100% by 2030 according to NEP 2020 and new pedagogical structure for all as well as digital learning and school learning. NEP 2020 emphasis on ECCE, and the 10+2 current structure of school education is to be replaced by a 5+3+3+4 curricular structure respectively corresponding to ages 3-8, 8-11, 11-14, and 14-18 years. Policy says about PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development) that is emphasis on conceptual understanding, promoting multilingualism and the power of language in teaching and learning, focus on regular formative assessment for learning rather than the summative assessment, wide use of technology in teaching and learning, making India a global knowledge hub. New policy 2020 aims to develop all capacities of human beings -intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner. India will be promote as global study hub providing quality education at minimum costs as glorious history of Indian education.

2. Review of Literature:

Abou M. Samir, Taj-Eddin, Seddiek N., El-Khouly M., Nosseir Ann (2014) worked on -E-Learning and Students' Motivation: A Research Study on the Effect of E-Learning on Higher Education. This study demonstrates how undergraduate students' motivation for the learning process is raised when interactive e-learning features are used.

Kumar N., Bajpai R. P. (2015) Conducted a study on- Impact of E-learning on Achievement Motivation and Academic Performance - A Case Study of College Students in Sikkim, The impact of e-learning on academic performance and achievement motivation was the main focus of this study. Contrary to the study's expectations, e-learning has been shown to have a positive impact on academic performance and achievement motivation.

Prof. Suryawanshi & Prof. Suryawanshi (2015) reviewed on - Fundamentals of E-Learning Models: A Review. This paper reviews the fundamental e-learning process models. Here, we've outlined some of the core theories that various researchers use to improve educational technology and seize chances for students to create efficient learning strategies for coping with a variety of information sources and web information overload. In fact, effective teaching naturally suggests that teachers must be visible in order to develop effective learners. These models are crucial to the advancement and development of the e-learning process.

Christopher Blundell, Kar-Tin Lee, and Shaun Nykvist (2016) showed in this paper presents a tri-theory framework that was used to conceptualize these challenges. Activity Theory provided a mechanism for teachers to identify extrinsic influences in activity systems then contextualize and reduce the perceived significance of challenging contradictions. First and Second Systems The teachers conceptualized the discomfort associated with practice changes by using Thinking Theory to investigate the role of routine, attitudes, and beliefs in their practice. The interaction between extrinsic and intrinsic influences during the teachers' joint attempts to consciously transform their practice is explained by the framework of transformative learning theory. The tri-theory framework served as a common discourse language that enabled the teachers to contextualize the difficulties in implementing digital learning cooperatively.

Naresh Ramavath (2021) conducted a study to explain the challenges and opportunities of the Digital learning effect in the 21st century in India. In the Indian education influencing so many things, like population, poverty, teacher's skills, teaching method, pedagogy, and finances. One of the educational approaches that is most impacted is digital learning. Online education chasing a new dimension with education. The country's strength is its education. In primary school, secondary school, higher secondary school, and university, there are distinct educational phases in Indian education. The United States has the largest education system in the world, followed by China and India, which is ranked third overall. India is a developing country that has made difficult progress in the field of education since gaining its independence. The Indian education system faces many obstacles, but it also has many chances to overcome these obstacles and create far better educational systems that are prepared for the digital learning of the twenty-first century.

2.1 Statement of the Problem:

The present study is stated as "Digital Learning in the Context of NEP 2020: A Comprehensive Analysis".

2.2. Aims and Objectives of the Study:

1. To analyses and know the digital education accordingly NEP 2020.
2. To understand the needs of digital education of NEP 2020.
3. To investigate the challenges and opportunities of digital education of NEP 2020.

3. Methodology of the Study:

The qualitative research approach was adopted in this study. Researcher used a lot of written material and reviews, previous studies, journals, magazines, research articles and studies related to E-Learning also including books, articles, and web databases as secondary data.

4. Analyze and Discussion:-

4.1 What is Digital Learning? :

It is commonly believed that digital learning is the future of education and learning (Channappa et al. 2022). It is a type of learning that facilitates instructional programs with the help of digital technology. Digital learning has made its impact in all areas and disciplines of learning. It also enables students at all levels of school, college and university to learn at their own time and pace (Gond and Gupta. 2017).

4.2 Characteristics of Digital Learning:

1. **Individual choice of knowledge sources:** Digital learning helps students choose sources of knowledge according to their personal preferences
2. **Use of collective knowledge:** Digital learning helps students to apply knowledge collaboratively
3. **Fast search for relevant content:** Digital learning specifically helps learners search for relevant content.
4. **Exchange of content with others:** Digital learning helps students share learning content.
5. **Better control of the learning process:** Digital learning specifically helps students to control the learning process (Faustmann. G. et al 2019).

4.5. Benefits to Students:

- Digital learning helps students to prepare projects and presentation.
- Students can give their online exam and view their results.
- It is particularly helpful is collect teaching contents of missed lecture online.
- Students can access library online.

4.6. NEP 2020 and Digital Learning:

The National Educational Technology Forum, or NETF, advises the federal and state governments on the use of technology in education and works to develop the institutional and intellectual capacities of ET. Clearly state new directions for innovation and research. Online and digital education is the last component of National Education Policy 2020 to achieve SDG 8. Despite its many advantages, digital or online learning cannot replace traditional classroom instruction. Learners and anyone else with the ability to continuously augment and zoom in on content through digital means can take advantage of its flexibility and personalization. A supportive environment for the shift to digital education has been established by the swift rise in internet penetration and the expansion of government initiatives like the Digital India campaign. The Ministry of Human Resource Development's recently launched PM e-Vidya will be comparable to this (MHRD). This is a nationwide public relations campaign that will link all initiatives to online, digital, and broadcast education. Even the BSE Shiksha Vani podcast by AIR, TV, SWAYAM (online MOOCS on various subjects), IITPAL (a platform for exam preparation), and study materials for students with disabilities created by NIOS are included. The MHRD will distribute and advance each of these e-learning domains in a methodical and comprehensive manner.

An independent organization called the National Educational Technology Forum will be established to provide a forum for the open exchange of information about how to use technology to enhance planning, administration, assessment, and learning. DIKSHA/SWAYAM and other technology-based educational programs will be more effectively implemented in K-12 and higher education. Research on disruptive technologies and the development of educational materials and programs, including online courses in cutting-edge fields, will be major responsibilities of HEIs.

4.6. Challenges and Opportunities:

We understand that there are a lot of challenges to be solved before ICT is implemented in remote school locations. Inadequate infrastructure, intermittent internet connectivity, and limited device accessibility are some of the main challenges. Moreover, access to equal educational opportunities is hampered for residents of rural and urban areas by the digital divide. We note, in particular, that Maharashtra's rural schools have incorporated ICT: The Maharashtra government has initiated several measures to integrate ICT into schools in the state's outlying areas. GOVT provides computer labs, smart classrooms, and teacher training programs to enhance digital learning. Further investigation and assessment of the results and effectiveness of these initiatives are required for the better.

For online activities, teachers' digital literacy needs to be assessed, and they also need to get a lot of training. inadequate infrastructure for openly available and publicly accessible digital resources. However, challenges with screen-based learning restrict the availability of particular course and subject offerings in digital and online environments, which closes the digital divide.

4.7. Pedagogical Shift in Digital Learning:

Research on disruptive technology, the state of pedagogical implementation in schools and teacher education institutions today, and the creation of e-content and strategies are all necessary. Training modules on the integration of content, ICT, and pedagogy in accordance with the new curriculum and pedagogical framework suggested in Nep 2020 spontaneous customization of digital education program structures at the national level, including portals. Apps and labs pertaining to education that are developed with the intention of meeting educational needs and launching MOOCs for educators and students.

4.8. Education Technology in NEP 2020:

To meet the current and future challenges in providing high-quality education for everyone, the ICT-based educational initiatives and operating digital platforms must be elaborated and optimized. With coordinated efforts like the Digital India campaign, the digital divide is eradicated. It is crucial that issues of equity are sufficiently addressed when using technology for online and digital learning. NEP 2020 called for the creation of a specialized unit for the development of top-notch digital infrastructure, capacity, and educational digital content.

4.9. Recommendations and Future Directions:

With the advent of digital technologies and their growing influence in education, there are a ton of recommendations available for teaching and learning across all levels of education, from K-12. The NETF, CIET, NIOS, IGNOU, IITs, NITs, etc. are all recommended by the policy. That will be used as fuel for numerous pilot projects involving digital learning. Additionally, several platforms need to be set up. Continuous e-learning platforms such as DIKSHA, SWAYAM, and SWAYAMPARBHA will also be utilized to establish virtual or online labs, guaranteeing equitable access to high-quality, hands-on, practical learning experiences for all students.

The recent surge in pandemics and epidemics has prompted a thorough set of recommendations for promoting online education in order to ensure preparedness with alternate, high-quality educational options anytime and wherever traditional, in-person modes of instruction are not feasible. The MHRD will establish a specialized unit to manage the development of digital content, digital infrastructure, and capacity building in order to meet the e-education requirements of both secondary and postsecondary education. Teachers need to be trained or prepared for digital education in accordance with NEP2020 in order to implement digital education. Research is also occasionally needed to improve the promotion of digital education for future national developments and easier accessibility. Research disruptive technology, the state of ICT implementation in teacher education institutions and schools, and

the creation of e-content and strategies. training modules on the integration of content, ICT, and pedagogy in accordance with the new curriculum and pedagogical framework suggested in NEP 2020.

To be successful online educators, teachers need to receive the right training and development. One cannot presume that an instructor who is effective in a traditional classroom will also be effective in an online one. Online assessments necessitate a different approach in addition to pedagogical changes (National Education Policy 2020 59). Large-scale online exam administration presents several obstacles, such as restrictions on the kinds of questions that can be asked in an online setting, managing power and network outages, and stopping unethical behavior. In the online/digital education space, some course/subject types, like performing arts and science practical, have limitations that can be partially addressed with creative solutions. Furthermore, online learning will inevitably turn into a screen-based curriculum with little emphasis on the social, affective, and psychomotor aspects of learning unless it is combined with experiential and activity-based learning.

6. Conclusion:

Given the growing significance of using technology to enhance teaching and learning at all educational levels, from K–12 to postsecondary, this Policy suggests the following significant initiatives. online setting, managing power and network outages, and stopping unethical behavior. For ICT integration in rural schools to be successful, a number of issues must be resolved. Among the major obstacles are inadequate internet connectivity, limited access to devices, lack of electricity, and limited infrastructure. India leads the world in ICT and other cutting-edge fields like space exploration. The country as a whole is being transformed into a digitally empowered society and knowledge economy with the aid of the Digital India Campaign. Technology in education will be crucial to improving both the procedures and the results of education. Online and digital education is the last component of National Education Policy 2020 to achieve SDG 8.

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