Online and Digital Education: Ensuring Equitable Use of Technology in respect to National Education Policy- 2020

Akanksha Srivastava[1] & Dr. Neeta Sinha[2]

[1]Research Scholar & [2]Associate Professor

Department of Education

CMP College, University of Allahabad (A Central University)

Prayagraj, Uttar Pradesh, India

E-mail: akkishri27@gmail.com

Abstract

The long-awaited policy following 1986 is the National Education Policy (NEP) 2020. The policy brings about a radical shift in every aspect of education, and the NEP's reliance on educational technology is to be applauded. To build a knowledge-based society, we must equip the people who will come after us with the skills they'll need to do the work. Their capacity to imagine, research, and construct a future that is less stressful for the environment is something we must foster in them. The strategy included many important suggestions for incorporating technology into classrooms more evenly. Based on an analysis of the policy document NEP2020, this study draws attention to a number of important objectives related to online and digital education, including creating a digitally independent India through the establishment of its infrastructure and capacity; and ensuring equitable use of technology.

Key Words: *Online, Digital, ICT, Education, NEP-2020*

Introduction

Nowadays, education is just as important as food and shelter. In today's fast-paced world, education is boosted by digital technology, which aims to provide vast amounts of information while saving a lot of time. It's important to remember this. Our generation's most important tool is digitalization, which helps us not only in our personal but also in our professional activities. Data acquisition, research, and subject matter comprehension enhancement are common educational uses of it. Education is the key to societal and economic digital evolution throughout the nation's current digital transformation. The COVID-19 epidemic disrupted in-person training, dramatically expanding the relevance of digital learning, which is not new and has been around in different ways for a while. As a precaution against the current epidemic, most schools are switching to online courses and suspending regular classroom schedules. Digital education is gradually displacing the traditional approach of teaching that relies on chalk and discourse.

Exciting new approaches of using instructional technology are appearing in today's schools. There is a shift in focus from brainwashing children with ideas to helping them become critical thinkers with strong computer literacy skills.

Educators and lawmakers have come to a consensus on the best way to incorporate technology into the classroom. "The ISTE (International Society for Technology in Education) Standards for Students" have expanded to include new areas of focus, such as the cultivation of digital citizenship skills appropriate to the modern world, the improvement of students' communication and teamwork abilities, and the completion of projects requiring students to work together to solve problems. Another must-have is software and hardware proficiency.

New Education Policy (NEP) was adopted by the Union government in July 2020. Ensuring equal access to education, from preschool all the way through high school, is its only purpose. Formed in 2020, the NEP-2020 succeeded the 1986 National Policy of Education. This comprehensive system will focus on all stages of education in India, from elementary to university.

When it comes to education, NEP 2020 is a game-changer. One of the primary focuses of the policy is the integration of technology into the classroom. In order to break down language barriers, the strategy also highlights the need of being bilingual. Not only does technology facilitate access, but it also aids in the administration and organization of educational programs. To better prepare students to succeed in today's interconnected world, the National Education Policy is reimagining classroom instruction with an eye on improving student outcomes.

Technology-related Features of NEP- 2020

Technology is Introduced as Early as the Elementary Stage

Inquisitiveness and a propensity for questioning are prevalent among young children. Young students in the early grades demonstrate proficiency in using classroom technology due to their preexisting knowledge and development. Equipping children with technology is the first and primary step.

The objectives of NEP 2020 include the augmentation of educational opportunities, particularly for children with exceptional requirements, acknowledging technology as a facilitative instrument for educators, promoting the establishment of digital libraries, and eradicating linguistic obstacles between students and instructors. Coding, a vital skill for pupils to master, will also be included in school curriculum. Integrating technology into online teacher training and education may be very advantageous.

Professional and Higher Education

Technological applications for incorporation into legal and medical professional education. There is a proposal to use technology in order to attain universal literacy. This necessitates the implementation of adult learning choices that are based on advanced technology and of superior quality.

Recognizing the importance of technology in tackling many social issues and promoting interdisciplinary research and innovation. One suggestion to promote a research-oriented environment is to create a National Research Foundation. Additionally, there is a need for Higher Education Institutions (HEIs) to construct start-up entrepreneurship and technology development centers.

The National Educational Technology Forum's (NETF) principal goal is to create a platform where people can talk freely about how to utilize technology to enhance administrative procedures, classroom instruction, and student achievement. The NETF is responsible for the following tasks:

The stated purposes of educational technology include: (a) offering independent, evidence-based advice to federal and state agencies on technology-based interventions; (b) cultivating expertise and infrastructure in this field; (c) identifying future strategic directions for this sector; and (d) proposing innovative concepts for future research and development.

Education Administration

The purpose of establishing the Academic Bank of Credit is to digitally document academic credits obtained from different Higher Education Institutions (HEIs). These accumulated credits will be used to confer degrees.

The State School Standards Authority and the Higher Education Commission of India (comprising the General Education Council, National Higher Education Grants Council, National Accreditation Council, and National Higher Education Regulatory Council) are two examples of regulatory bodies that could greatly benefit from technological advancements that would increase operational efficiency and transparency.

Achieving Artificial Intelligence Adaptation

We must adapt to the changes brought about by AI's broad usage across various industries, the Policy stresses, while also acknowledging the risks that come with it.

The formal determination of the relevant technologies will be made by the Education Ministry using the periodical studies given by the NETF. New technologies will be grouped by the NETF according to their predicted impact and how long it will take for them to have a noteworthy impact.

Concerns about data management and security are only two examples of how the Policy is first to acknowledge the need to educate the public and do thorough study on all aspects of new disruptive technologies. Much interest has been piqued by the idea of integrating cutting-edge technology like 3D, simulation, robots, and AI. Along with that, it makes it possible to combine online and hands-on learning in blended courses. It also suggests enhancing the current digital learning platforms.

Digital INDIA

Under the new education strategy, there has been a strong emphasis on the development of technical tools, online learning environments, and infrastructure. Educators who are proficient with technology are in high demand; therefore efforts to educate them have received a lot of attention.

Without teachers who are comfortable with technology, it will be impossible to create online curricula or assessments. There has been much-deserved focus on blended learning and flipped classes in the new educational ecology.

If students know what we'll be covering in class before it starts, they could be more invested in the material. Some of the most significant initiatives in the field of online and digital education include the creation of virtual laboratories, online assessment tools, digital libraries, content creation, and online teaching platforms. at addition to a plethora of educational applications, NEP 2020 calls for further DIKSHA/SWAYAM integration at universities.

The National Technological Forum (NETF) and other appropriate organizations will set standards for online/digital education's content, technology, and pedagogy as more research into online/digital education becomes available. State education agencies, school districts, university administrations, and others might use these standards as a starting point for e-learning policymaking.

Challenges

- *Inadequate Funding*
  The Economic Survey 2019-2020 reveals that the combined expenditure on education by the Central and state Governments was 3.1% of the Gross Domestic Product (GDP). An alteration in the cost structure of schooling is inevitable.
  While allocating 6% of GDP for financing may seem uncertain, some elements of the transformation might potentially be achieved at a lower cost but on a larger scale.

- *Inadequate Integration*
  The concept and the text both exhibit deficiencies, including the absence of technology integration and education. Continuous learning is a critical aspect that must have been included in the shift to emerging sciences, but there are still considerable gaps.

- *Resource Crunch*
  Although internet connection is widely accessible, not all students have the necessary tools to effectively utilize technology-based teaching. Certain families may lack the financial means to afford internet and computer access for their children. This is especially true for impoverished homes with several children.
  For the most part, the effectiveness of instructional technology relies heavily on reliable Wi-Fi connectivity. Overcoming this significant obstacle would be a major achievement. The use of technology in Indian classrooms seems promising until Wi-Fi connectivity problems emerge.

- *Lack of Adequate Skilled Professionals and Teachers:*

Insufficient and continuous professional development opportunities are lacking for teachers who need to integrate new technology into their lectures but are unable to do so due to their lack of preparedness or understanding of these technologies. There is a need for a substantial reservoir of highly competent educators. The plan in school education aims to implement a substantial restructuring of the curriculum, which is a very beneficial step forward.

Suggestion to Overcome Identified Challenges

- Indians, despite their country's relative poverty, would do well to realize that cutting costs is possible via embracing cutting-edge technology. Software developed in India has the potential to be a lucrative investment. There is usually a substantial return on investment when it comes to buying and upgrading software.

- Integrating technology in the classroom should be considered as a last option, only after determining educational priorities and defining the specific function that technology should have in a certain learning activity. Classroom instructors should be given the opportunity to participate in technical policy choices as they are ultimately responsible for enabling education. Integrating state-of-the-art methods into teaching Educators have the responsibility to choose instructional approaches that are customized to their students' learning goals, chosen resources, learning preferences, modalities, and paces.

- Numerous students are unable to match the pace of their online counterparts due to their lack of access to high-speed internet or a dependable internet connection, which are essential for participating in virtual sessions. Their education is hindered by their incompetent supervisors, resulting in difficulty following the Course Management System. The majority of individuals lack convenient access to on-campus resources and have difficulties in meeting the course's technology requirements due to their off-campus residence. Learning Resource Centers provide technical assistance to students without personal access to computers. In order to address this problem, it is important for students to be aware, prior to enrolling in a school, of the specific technological resources that will be necessary to successfully fulfill their academic obligations.

- Technology has greatly facilitated the goal of delivering education that is efficient, focused on the needs of the user, incorporates several disciplines, allows for individualized progress, and occurs in real-time. It is adaptable to suit the requirements of individual learners and may be used with a diverse range of instructional approaches. This fact supports its extensive use as an instructional instrument in the academic realm. This is essential because it provides students with the necessary abilities in analytical, integrative, applied, and creative thinking that are vital for success in the modern workplace. In the contemporary day, it is essential for professional educators to possess a comprehensive grasp of how to use Information and Communication Technology (ICT) into their instructional practices. Teachers are relied upon to strategically design lessons and activities that effectively use the most beneficial kinds of ICT to augment their students' comprehension of the subject matter they are teaching. The chosen technical

resources should enhance the knowledge and skills of instructors and facilitate the educational process for their students. Due to advancements in technology, educators are now able to customize their lessons to accommodate the individual requirements and learning preferences of each student. Consequently, the students get a more profound comprehension of the subject matter, hence enhancing the probability of long-term retention.

Conclusion

In the modern day, education relies on digital technology to efficiently provide extensive knowledge and save valuable time. The notion of digital education is not new and has been in different iterations for a considerable period. However, its significance has notably increased during the COVID-19 pandemic. In July 2020, the New Education Policy (NEP) was approved by the Union government. The framework will take a comprehensive approach to teaching all three levels of education in India: primary, secondary, and higher. The policy highlights the importance of using technology in the classroom. When it comes to information and communication technology and other cutting-edge fields like space exploration, India is unrivaled on a global scale. A knowledge-based economy and digitally enabled society are becoming the norm in India, thanks to the Digital India Campaign. Technology will be vital in improving educational procedures and outcomes, but education itself will be pivotal in this change. So, technology and learning are mutually supportive at every level.

References

1. NEP 2020. National Education Policy 2020; Ministry of Human Resource Development, Government of India: New Delhi, India, 2020

2. Jha, K. & Naaz. (2020). The Role of MOOCs in Vocational Education with Special Reference to National Education Policy- 2020. Research Gate. Retrieved January 15, 2023, from:https://www.Researchgate.Net/Publication/363694265_The_Role_Of_Moocs_In_Vocational_EducationWith_Special_Reference_To_National_Education_Policy_-_2020

3. Jha, Jha, & Jha. (2020). National Education Policy 2020: A Step towards Technology Driven Education and Self-reliant India. Researchgate. Retrieved January 11, 2023, from https://www.researchgate.net/publication/352909776_National_Education_Policy_2020_A_Step_towards_Technology_Driven_Education_and_Self-reliant_India

4. Online and Digital Education: Ensuring Equitable Use of Technology in NEP 2020 New Educational Policy for India. (n.d.). Online and Digital Education: Ensuring Equitable Use of Technology in NEP 2020 New Educational Policy for India. Retrieved January 15, 2023, from https://shikshan.org/nep-2020/online-digital-education-technology/

5. Team, E. (2021, March 24). NEP 2020 and Online Education – A Paradigm Shift - Higher Education Digest. Higher Education Digest. Retrieved January 16, 2023, from https://www.highereducationdigest.com/nep-2020-and-online-education-a-paradigm-shift/