Digital Education and the Digital Divide in India: An Analysis of NEP 2020

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Abstract

Digital education has become an important part of India's educational transformation, driven by the growing use of online learning platforms, digital resources, and information and communication technologies in teaching and learning. According to the National Education Policy (NEP) 2020, technology can expand access to education, improve teaching, provide educational content, make teacher development more efficient, and make learning easier. While the policy recognizes the importance of technology for disadvantaged learners, it also affirms that unequal access due to inadequate infrastructure will limit their ability to use it. The digital divide in India is not only about internet connections and electronic gadgets but also about affordability, digital literacy, electricity, language, gender, geography, and institutional differences. This article studies the relation between digital education and educational inequality in India with reference to NEP 2020. The article also examines the policy's provisions and the real dilemma it faces. A descriptive analysis and an analytical research design are adopted in this study, which is based exclusively on secondary sources. Various policy documents, educational reports, published research, and other relevant institutional publications have been used in carrying out this study. The Annual Status of Education Report (ASER) 2024 shows that smartphones are available in many households. However, that does not mean that everyone owns one. Moreover, it does not ensure that people use these gadgets for education. Digital education can ensure educational inclusion only when equitable infrastructure, accessible learning materials, teacher training, digital literacy, and suitable offline alternatives accompany the expansion of technology, the paper argues. The study concludes that the effective implementation of NEP 2020 requires digital education that is inclusive, affordable, multilingual, and learner-friendly. The National Education Policy 2020 promotes a range of initiatives that will help overcome the digital divide.

Keywords: NEP 2020, digital education, digital divide, educational inclusion, digital literacy, educational inequality

1. Introduction

Education is vital to a person's overall development and to societies' social and economic development. In modern life, technology has changed how educational knowledge is produced, manufactured, distributed, accessed, and

appraised. Digital Classrooms, Learning Applications, Virtual Libraries, class recordings, and E-Materials make Education beyond the Four Walls of a Classroom Possible. Learners can have more flexible learning experiences, access a range of educational resources, and pursue self-study. Although technology can support education, its effects vary depending on social, economic, and institutional conditions. In India, because of the diversity and scale of the education system, Digital Education has become important. Various socioeconomic factors, including household income, location, school infrastructure, gender relations, language, and access to technology, can reduce students' participation in digital learning. Youngsters from poor households may not have smartphones, computers, stable internet connections, and sufficient data. In some families, a device must be shared among 2-3 children and adults, leaving little time for learning. Students living in remote and rural areas may face electricity disruptions, inadequate network coverage, and a lack of digital skills. The National Education Policy 2020 is an important tool to understand the link between technology, advancement, and inclusion. The policy recognizes that technology can improve educational planning, teaching, learning, assessment, and teacher preparation. The section on online and digital education focuses on the benefits of technology and how it can help us. Moreover, it also addresses the problems that unequal access and inappropriate pedagogy and quality will raise. (Ministry of Education, 2020) The policy emphasizes teacher training, pilot studies, digital infrastructure, and blended learning strategies. However, even if a policy integrates digital education, it does not guarantee equal educational opportunity. Digital content can't replace the devices, connectivity, environments, and teaching guidance that are not in place. Educational inequality can be reproduced when digital learning systems assume every student has the same tech resources and learning conditions. The ASER 2024 provides useful evidence regarding rural adolescents' access to smartphones and digital competencies. Findings noted that around 89.1% of rural children aged 14-16 surveyed reported having a smartphone at home, while 82.2% reported knowing how to operate a smartphone. Of those who claimed to use a smartphone, 31.4% possessed one. According to this report, the frequency of using smartphones to view gender-related content is equal. This study highlights the difference between household-level access and individual-level access. In this context, the current research examines digital education in India under NEP 2020. It examines the role of digital technologies in educational engagement, the structural factors behind the digital divide, and policy measures to improve access to digital learning. Rather than treating technology as a standalone panacea for education's problems, the paper treats digital education as a process whose effectiveness depends on infrastructure, pedagogy, cost, accessibility, and social equality**.**

2. Review of Literature

The literature on digital education and educational inequalities presents technological development as an opportunity for learners, but it also highlights the unequal conditions under which learners access these opportunities. Policy documents and empirical studies show that the educational value of digital technology depends not only on its availability but also on learners' and institutions' capacity to use it.

According to the Ministry of Education (2020), NEP 2020, technology is a vital instrument for improving access to education, innovative teaching approaches, student assessment, educational administration, and professional development. The policy calls for expanded digital infrastructure, education platforms, teacher preparation, and clear standards for online education. Significantly, it recognizes that the digital divide must be closed to ensure equitable access to technology. Consequently, the policy frames digital education as a techno-educational issue.

According to the Global Education Monitoring Report Team (2023), the report highlights the importance of digital technology. This report focuses on the relevance of digital technology—equity, scalability, and sustainability. The report argues that technology must support learning, not exist for its own sake. It also emphasizes access, teacher readiness, the quality of educational material, and the broader impact of technology use. This outlook is relevant for India, as scaling digital learning must be assessed against learners' actual conditions and requirements.

The ASER Center (2025), in its Annual Status of Education Report (Rural) 2024, presents evidence on the educational participation, learning outcomes, and digital literacy of rural children. The assessment for adolescents aged 14–16 examines smartphone availability, ownership, use, and selected digital skills. The results showed that household access does not equate to personal ownership or equal opportunities to use devices. Discrepancies between boys and girls also show that digital inequality can persist even with access to technology.

Discussions and research on educational technology in institutions show that digital learning can provide flexible access to educational resources when conventional learning is limited by geographical distance or a shortage of institutional facilities. In addition, unequal connectivity, limited devices, low digital competence, and inaccessible learning materials can prevent students from vulnerable backgrounds from participating effectively. According to the UNESCO report on technology in education (Global Education Monitoring Report Team, 2023), assessments of technological interventions should focus on equity and educational quality, not only access.

The NEP 2020 literature review recognizes technology’s potential in teaching and learning but also acknowledges unequal access as a hurdle. Digital inclusion cannot be effectively analyzed without reference to several interlinked levels: physical access to devices, networks, and other technological infrastructures (such as electrical power) and their affordability for sustained participation; the development of requisite digital skills; the accessibility of educational content; and the ability to convert digital participation into effective or meaningful learning. In this paper, we examine the relationship between digital education and educational inequality within the NEP 2020 framework, based on policy documents and existing empirical evidence.

3. Objectives of the Study

- To examine the role of digital education in enhancing access and inclusion in education in India in the context of NEP 2020.
- To identify the key issues related to the digital divide and suggest policy measures to ensure equitable and effective digital learning opportunities.

4. Research Methodology

The research strategy is descriptive and analytical and relies entirely on secondary data. It examines the National Education Policy 2020, the Annual Status of Education Report (ASER) 2024, UNESCO reports, government policy documents, and literature on digital education and educational inequality. The study does not use primary data such as questionnaires or interviews, nor does it involve any experiments with respondents. The study thematically examined the gathered documentary evidence under the following heads: digital access; affordability; digital literacy; gender and geographical inequalities; teacher preparedness; and implementation of NEP 2020. The study interprets existing evidence to comprehend the link between technological opportunities and structural barriers to educational inclusion. Because the study relies on secondary information, the results depend on the coverage, methods, and availability of the sources consulted; consequently, the analysis does not estimate the independent causal impact of NEP 2020 on student learning outcomes.

5. Digital Education under NEP 2020

NEP 2020 treats digital education as an important component of educational development while acknowledging that technology must be integrated carefully into teaching and learning. The policy recognizes that digital platforms can support access to education, expand learning resources, strengthen teacher preparation, and provide alternative learning arrangements when conventional classroom instruction is disrupted. Its approach is not limited to distributing electronic devices; it also addresses digital infrastructure, pedagogical practices, teacher training, educational content, and appropriate standards for online learning (Ministry of Education, 2020).

- **Expansion of Educational Access:** Digital education is recognized as an essential part of NEP 2020's educational development. NEP 2020 also emphasizes the careful integration of technology into teaching and learning. The policy acknowledges that digital platforms can expand access to education, broaden learning resources, strengthen teacher preparation, and provide alternative learning arrangements when classroom teaching is disrupted. The strategy goes beyond providing electronic devices. It encompasses digital infrastructure, teaching practices, teacher training, educational content, and the appropriate standards that support online learning (Ministry of Education, 2020).

- **Growth of Learning Accessibility**: Educational materials can become available on a larger scale than what schools and universities provide. Students can access recorded lectures, e-books, educational videos, virtual libraries, and additional study materials. Learners who live far from a school or college, or need extra time to grasp concepts taught in class, can benefit from these resources.
- **Digital Platforms and Educational Resources:** Digital education, too, offers independent and self-learning opportunities. Learners can refer back to recorded explanations, review difficult topics, and access other resources based on their learning needs. These possibilities can enhance educational participation when relevant devices, connectivity, accessible content, and teacher guidance are available. Just because a resource is available online does not mean it is universally accessible. Students who lack reliable connectivity or the right devices may be excluded from the same opportunities. Therefore, digital growth should be supported by measures that enable excluded learners to participate meaningfully. NEP2020 focuses on designing and using educational technology responsibly. The policy framework promotes experimentation, assessment of digital learning practices, and the development of appropriate content and pedagogical standards. A platform's effectiveness in educating learners depends on the quality, relevance, access, and usability of its resources. The digital educational content must also reflect India's linguistic and cultural diversity. When resources are available in languages students know, they can comprehend and participate better. This is especially true for those who cannot follow instructions given only in an unfamiliar language. Learners with disabilities can also benefit from accessibility features such as captions, screen-reader compatibility, adjustable text, and signing.
- **Teacher Development and Digital Pedagogy:** Teachers determine whether or not digital education contributes to significant learning. While technological tools can help teachers explain, demonstrate, assess, collaborate, and provide feedback, effective use depends on appropriate pedagogical knowledge. Teachers must choose suitable resources, design interactive activities, assess students' understanding, and support learners who face technological difficulties. NEP 2020 acknowledges the importance of training teachers for online and digital education. The policy warns that teachers successful in the usual classroom should not automatically be successful in online classrooms (Ministry of Education, 2020). Digital pedagogy thus needs professional development that addresses both technical and pedagogical skills. Teacher preparedness also means the capacity to deconstruct unreliable information, guard student privacy, manage online participation, and modify learning materials for students with varied learning profiles. Students should not have to upload their notes to digital platforms if they lack these competencies.
- **Blended Learning and Educational Continuity:** Blended learning combines face-to-face instruction with appropriate digital resources. Blended learning combines face-to-face instruction with appropriate digital resources. It allows educators to use classroom time for discussion, problem-solving, practical work, and clarification while giving additional digital material for independent study. The (Ministry of Education, 2020) NEP 2020 acknowledges that face-to-face learning remains a priority, even as effective blended learning models

emerge. This matters because online education cannot replace face-to-face classroom interaction, peer learning, practical experiences, and teacher support. Blended learning can be effective, especially in learning environments with intermittent connectivity. When students are offline for long periods, they can access downloadable resources or recorded lessons, printed materials, and offline scheduled activities. As such, a flexible model can support educational continuity without relying entirely on digital infrastructure.

6. Digital Divide in India

Some inequalities in our access to or use of technology, or the benefit we derive from it. In the education sector, the digital divide refers to disparities in device ownership, internet connectivity, affordability, digital skills, access to appropriate content, and the capacity to participate meaningfully in digital learning. The division should not be taken merely as a difference between smartphone owners and non-owners. A family might own a smartphone but lack enough data, network, or power. A student could use a device for basic communication and may not be able to navigate learning platforms, submit an assignment, evaluate information online, or protect private information. The rural young people equivalent of ASER 2024 shows these differences in 14- to 16-year-olds. It was reported that 89.1% have a smartphone at home. However, only 31.4% who reported knowing how to use a smartphone own it. Moreover, 82.2% reported knowing how to use a smartphone, with 85.5% for boys and 79.4% for girls (ASER Center, 2025). These findings include only rural adolescents of the specified ages and should not be misconstrued as estimates for all Indian students or the whole population.

- **Inequality in Digital Infrastructure:** Proper internet connection, electricity, and suitable devices are crucial for sustained digital learning. While many students can use smartphones, a smartphone is not as educationally functional as a computer or tablet for writing long assignments, creating presentations, using specialist software, or conducting research. Infrastructure disparities are likely to worsen in distant villages, tribal regions, poor localities, and places that are either power-deficient or network-deficient. Schools may lack adequate computer labs, functioning equipment, technical support, and classroom connectivity. These variations affect students by sometimes preventing them from using digital resources, or by limiting how often and how long they can use them. Because uniform access and subscription standards have proven inaccurate, educational institutions must develop infrastructure plans based on local conditions.
- **Economic Inequality and Affordability:** The capacity to buy devices, pay for internet, maintain technology, and replace damaged devices is influenced by household income. For low-income families, digital learning can compete with other household essentials. Recurring costs of data, electricity, repairs, and accessories may limit participation even if a device is available. Shared devices present another challenge. Without smartphones, students may have little opportunity to attend online classes or submit assignments if parents need them for work and many children need them for study. These restrictions can affect learners differently based on age, school

schedule, household obligations, and position in the family. For digital education, the focus should be on ongoing affordability rather than device affordability. Targeted support, community facilities, school access, and low-bandwidth resources can mitigate these barriers.

- **Gender Inequality in Digital Learning:** Gender gaps can impact one's ability to afford a device, access technology alone, and enroll in digital literacy classes. In some homes, girls may have less access to shared devices or have their internet use restricted. Domestic responsibilities, online safety concerns, and differing family expectations can also affect participation. ASER 2024 finds that 36.2% of boys and 26.9% of girls aged 14-16 in rural areas who claimed they can use a smartphone own one (ASER Center, 2025). This difference is significant, suggesting that having the technology at home does not necessarily give everyone access. Gender-sensitive digital education is not just about providing devices at home. It also requires equal opportunities to access these tools for educational work, develop digital skills with access to relevant content, and apply them in safe online spaces.
- **Geographical and Institutional Disparities:** India's educational institutions are located in geographic and administrative diversities. Schools in well-connected urban areas may have better access to digital infrastructure. However, schools in remote or poor areas struggle to maintain equipment and internet access. Different institutions have different institutional capacity to excel in digital education. Some schools have computer laboratories, trained staff, and structured digital learning. Some use personal devices at home; around one in ten go online sporadically. Even within the same education system, these disparities create unequal learning opportunities. Consequently, effective implementation necessitates coordination between national, state, district, and institutional authorities. To ensure equitable resource allocation based on need, local assessments should identify the specific barriers schools and communities face.
- **Digital Literacy and Meaningful Use:** Using a cellphone and going online is not digital literacy. It means searching for information, assessing its reliability, communicating responsibly, using educational applications, creating digital content, and understanding privacy and cybersecurity. Even if a student regularly uses social media, he may still need help searching for academic information, organizing digital notes, participating in online discussions, or identifying misinformation. Learning should be structured, not simply using a digital device. The ASER 2024 results show why it is important to distinguish between access and use. The report assesses basic digital skills and smartphone usage patterns among rural adolescents aged 14-16 (ASER Center, 2025). These findings suggest that educational institutions should systematically develop pupils' digital skills, especially for those with limited opportunities for independent practice.
- **Language and Accessibility Barriers:** Whether digital educational resources are usable depends in part on the language. If materials are available only in a few languages, they may not meet the needs of learners who prefer to study in their native or regional tongue. Users may avoid participation because of technical terminology, unfamiliar interfaces, and more. When websites, videos, apps, or e-texts aren't made according to accessibility

standards, learners with disabilities face extra challenges. Missing image descriptions, video captions, and inaccessible interfaces can hinder participation. An inclusive digital education system should therefore provide multilingual material, accessible digital interfaces, alternative formats, and suitable learning support. These measures will ensure that technological expansion benefits learners of different languages and abilities.

7. Opportunities for Promoting Digital Education under NEP 2020

Digital education offers several opportunities to improve the reach and flexibility of India's education system. Nevertheless, these opportunities must be aligned with the needs and conditions for educational technology use.

- **Improving Access to Educational Resources:** Digital libraries, e-books, recorded lectures, and online education platforms can make educational materials more accessible outside the classroom. Learners can access explanations and other reference materials, ultimately learning at their own rate and according to their own needs. These can be particularly helpful for those students who do not have access to libraries, subject specialists, or extra academic support. Yet, resource availability must be matched with affordable connectivity and suitable devices. Allowing students to download educational materials promotes offline learning for those with inconsistent internet access.
- **Supporting Personalized and Flexible Learning:** Digital tools can support differentiation by enabling teachers to offer supplementary exercises, recorded explanations, practice activities, and feedback tailored to students' learning needs. Students who struggle can revisit difficult concepts; students who move ahead quickly can pursue less challenging material. However, we should not totally rely on bots for personalization. Teachers should continue to interpret learning needs, provide direction, and determine whether the digital activity supports the curriculum's learning objectives.
- **Strengthening Teacher Professional Development:** Teachers can utilize training materials and teaching demonstrations, find subject-specific resources, and join professional learning communities through online professional development programs. Such opportunities may reduce travel and geographical distance challenges. Teacher training should focus on practical digital pedagogy, assessment, inclusive teaching, information evaluation, and online safety. Training should be continuous, supported by technical assistance, and tailored to teachers' existing levels of digital competence.
- **Promoting Multilingual and Inclusive Education:** Educational resources can now be developed and distributed in regional languages through digital technology. Alternative ways of accessing education include audio materials, captioned videos, accessible electronic texts, and assistive technologies. Such possibilities are relevant to a linguistically diverse nation like India. Creating multilingual, accessible content requires sustained investment in translation and quality assurance, interface design, and educators who understand the needs of specific learner groups.

- **Strengthening Educational Continuity:** Digital and blended learning arrangements could help sustain education when schools are temporarily closed due to natural disasters, public emergencies, or other disruptions. You can make use of recorded lessons, downloadable materials, educational broadcasts, and school-based digital facilities. Such options are necessary as digital education alone can leave behind students with poor connectivity and limited devices. Using digital and in-person resources diversifies and strengthens educational delivery.

8. Challenges in Implementing NEP 2020

Although NEP 2020 recognizes the role of technology, it must turn this vision into reality to address inequalities and institutional differences.

- **The Gap Between Policy and Implementation:** There is a gap between policy and implementation. Although national policy sets the direction, the implementation depends on infrastructure, financing, institutional capacity, coordination, and monitoring. Schools may differ in their ability to provide digital facilities, maintain equipment, and organize technology-supported teaching. Focusing on platform availability or devices distributed may not capture whether students can learn from them. Evaluation should therefore consider device availability, connectivity, frequency of educational use, teacher preparedness, accessibility, and learning experiences.
- **Insufficient Teacher Preparedness:** The first challenge to digital education is insufficient teacher preparedness. They must change their teaching methods, develop suitable online activities, assess students digitally, and support them through difficulties. Teachers who aren't trained in digital technologies use them only for sharing handouts or recorded lectures. They do not take advantage of opportunities for interaction and feedback. As a result, professional development must go beyond basic technical training. To teach digitally, teachers also need ample opportunities to practice and exchange experiences through mentoring. Moreover, they need to evaluate digital tools to assess their educational value.
- **Risks to Privacy and Online Safety:** Digital learning platforms might acquire personal information, such as learning records and usage data. This can pose privacy and online safety risks. Students can also come across misleading information, inappropriate material, and cyberbullying. Moreover, someone may try to misappropriate your private information. Educational institutions should therefore promote using technology responsibly. They must protect students' data and implement appropriate safeguards. Privacy settings, password security, responsible communication, and procedures for reporting online harm matter for both students and teachers. Technology adoption should come with clear accountability and appropriate data-protection practices.
- **Maintaining Educational Quality:** Just because digital education is expanding, it does not mean education is getting better. Poorly designed materials, excessive screen time, limited feedback, technology failures, and a lack of teacher interaction may reduce educational effectiveness. According to the Global Education Monitoring Report Team (2023), UNESCO's 2023 Global Education Monitoring Report calls for assessing educational

technology for equity, relevance, scalability, and sustainability. From this viewpoint, schools should select new technologies based on a clear educational purpose, not just because they have the latest gadget.

- **Financial and Institutional Sustainability:** Digital learning requires ongoing expenditure on devices, software, connectivity, maintenance, cybersecurity, accessibility, and teacher training. Once initial funding expires, equipment might become outdated, and institutions may be unable to deliver services. Your long-term plan must include budgets for maintenance, technical support, and periodic evaluations. Joint planning for sustainable implementation should also involve educational institutions, government agencies, and relevant technology providers.

9. Policy Measures for Bridging the Digital Divide

To bridge the digital divide and ensure inclusive digital development, a holistic approach is essential. These measures are proposed based on the policy and the evidence reviewed.

- **Ensure Affordable and Reliable Digital Access:** Ensure efficient and affordable access to digital networks. Education authorities should identify students and schools without appropriate devices, connectivity, or electricity. Addressing these barriers may involve targeted device-support programs, school computer laboratories, community digital learning centers, and affordable internet access. Where household access is limited, schools or community institutions can offer scheduled opportunities for students to use digital resources. Such arrangements should avoid imposing costs on disadvantaged families.
- **Strengthen Digital Literacy:** Digital literacy must be developed as a program of education. Students need to learn to search for information, evaluate sources, operate educational platforms, create digital content, and safeguard information while communicating sensibly. Digital literacy programs must be appropriate for the age, language, education level, and technology skills of the learner. Pay special attention to students with access to devices but few opportunities to use them with guidance.
- **Expand Teacher Training:** Broaden In-service Training to Limit Teacher Career Switching. Teacher training programs should include digital pedagogy, inclusive design, designing digital assessments and evaluating educational resources, and online safety. Educators need practical support to modify materials for students with disabilities and those with limited connectivity. Continuous professional development is better than one-time training because technology platforms and educational needs keep changing.
- **Develop Multilingual and Accessible Resources:** Digital learning resources should be made available in appropriate Indian languages and should meet diverse learning needs. During development, use accessible formats, including captions, audio resources, screen-reader-friendly versions, and low-bandwidth versions. To ensure students learn from relevant, reliable materials, educational authorities should assess the quality of these digital materials and ensure they target the correct age group. Ensure both online and offline learning options.

- **Maintain Online and Offline Learning Alternatives:** Digital learning ought to complement and not replace direct learning. Beneficiaries who cannot participate should not suffer a loss, as printed learning materials, downloadable lessons, educational broadcasts, and face-to-face support will remain available. This flexible approach would help ensure that access to education does not depend entirely on owning personal devices or having a reliable internet connection.
- **Establish Equity-Based Monitoring:** Monitoring regimes ought to gauge more than just how many schools have them. Rewritten text: Relevant indicators are access to devices, connectivity reliability and affordability, digital skills, teacher training and access, participation, and problem-solving experience. Data should be analyzed by gender, household income, disability, location, and other related dimensions of disadvantage. This process can help policymakers identify underserved groups in need of support.

10. Discussion

The analysis suggests that the digital education recommendation under NEP 2020 offers opportunities for educational inclusion but faces challenges rooted in existing inequalities. Through technology, access to learning resources can be broadened, flexibility for studying offered, teacher development supported, and alternative arrangements made when conventional teaching cannot continue. Still, these benefits are dependent on whether learners have the resources and capabilities to engage meaningfully. Evidence from ASER 2024 is especially useful here. A relatively large share of rural adolescents report smartphone accessibility at home; a considerably smaller share of smartphone users own their devices. According to the ASER Center, differences in reported smartphone use between boys and girls show that household availability does not necessarily guarantee individual access. These findings do not establish the direct effect of NEP 2020. These findings suggest the kinds of inequalities implementation should address.

The results also indicate a digital divide. Although access to technology is vital, it should be considered alongside affordability, digital competence, language, accessibility, and access to training support. A student may own a phone but may not use it often. Alternatively, a school may have a digital platform but lack trained teachers and the technical resources to use it effectively in classroom practice.

The NEP 2020 policy framework is paramount because it acknowledges the potential of educational technology and the importance of equity. Yet, realizing these aims depends on implementation at institutions and in communities. Digital education cannot be assessed solely by the expansion of university technology; it must also be assessed by the learning opportunities it enables. Another implication concerns digital and traditional education. Digital platforms can support classroom education, but they do not automatically replicate the benefits of teacher engagement, collaborative engagement, hands-on learning, and individual guidance. A balanced

approach should therefore use technology where it strengthens educational objectives while retaining appropriate face-to-face and offline support. Ultimately, digital inclusion requires consistent institutional commitment. Investment in devices and connectivity also means teacher training, accessible and multilingual resources, data privacy, maintenance, and systematic evaluation w.e.f. 2020. The main policy challenge is not just to digitize education. But to ensure digital transformation does not deepen existing inequalities.

11. Conclusion

In India, digital education is becoming an important dimension of educational development. NEP 2020 provides a policy framework for infusing technology into teaching and learning, assessment, and teacher development. Digital platforms enable access to resources, flexible learning opportunities, professional development, and educational continuity. Nonetheless, unequal digital infrastructure development, differences in household income, device ownership, connectivity, gender relations, and digital literacy, language, and institutional preparedness shape these opportunities. ASER 2024 findings show that a smartphone in the household does not necessarily mean a smartphone for each child. The findings suggest the digital divide should be seen not as a technological problem, but as a broader educational and social one. Successfully implementing NEP 2020 requires low-cost connectivity, appropriate devices, continuous teacher training, multilingual and accessible educational resources, strong privacy protections, and reliable offline alternatives. Educational institutions must assess digital initiatives by how well they support meaningful participation and learning, rather than measuring success solely by technology availability. Ultimately, digital education can enhance educational inclusion if technological progress is backed by equity-oriented planning, institutional accountability, and ongoing support for disadvantaged learners.

References

- ASER Center. (2025). Annual status of education report (rural) 2024. https://asercentre.org/aser-2024/
- Global Education Monitoring Report Team. (2023). Global education monitoring report 2023: Technology in education—A tool on whose terms? UNESCO. https://www.unesco.org/gem-report/en/technology
- Helsper, E. J. (2021). The digital disconnect: The social causes and consequences of digital inequalities. SAGE Publications.
- Ministry of Education, Government of India. (2020). National education policy 2020. Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English.pdf
- Selwyn, N. (2016). Education and technology: Key issues and debates (2nd ed.). Bloomsbury Academic.
- Van Dijk, J. (2020). The digital divide. Polity Press.
- Warschauer, M. (2003). Technology and social inclusion: Rethinking the digital divide. MIT Press.

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