



TRANSFORMING PEDAGOGY THROUGH DIGITAL PLATFORMS: INSIGHTS FROM NEP 2020

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Abstract

The rapid expansion of digital technologies has created new possibilities for transforming teaching, learning, assessment, teacher development, and educational administration. In India, the National Education Policy 2020 provides a comprehensive policy framework for integrating technology into education while simultaneously recognising concerns related to equity, accessibility, teacher preparedness, data privacy, and the quality of digital content. The present article examines how digital platforms can facilitate pedagogical transformation in accordance with the vision of NEP 2020. It is a qualitative and conceptual study based on the analysis of policy documents, government reports, national digital-education platforms, and selected literature on technology-enabled pedagogy. Particular attention is given to Digital Infrastructure for Knowledge Sharing, Study Webs of Active Learning for Young Aspiring Minds, PM e-VIDYA, SWAYAM PRABHA, virtual laboratories, the National Digital Education Architecture, and technology-supported teacher professional development. The analysis indicates that digital platforms can promote blended learning, learner autonomy, differentiated instruction, multilingual learning, collaborative knowledge construction, continuous assessment, and wider access to educational resources. However, the availability of technology does not automatically lead to pedagogical improvement. Digital inequality, inadequate infrastructure, limited teacher competence, poor-quality content, linguistic imbalance, screen dependency, data privacy risks, and an excessive emphasis on content delivery continue to restrict meaningful transformation. The article argues that NEP 2020 should be implemented through a pedagogy-first rather than a technology-first approach. It proposes an integrated framework based on equitable access, teacher capacity building, contextualised content, inclusive design, ethical data governance, blended learning, and continuous evaluation. Digital platforms can transform Indian education only when they strengthen, rather than replace, the



professional role of teachers and support active, experiential, inclusive, and socially meaningful learning.

Keywords: NEP 2020, digital platforms, digital pedagogy, blended learning, DIKSHA, SWAYAM, educational technology, teacher education, inclusive education.

1. Introduction

Digital technology has become an important component of contemporary education. Learning management systems, mobile applications, digital repositories, virtual laboratories, video-conferencing tools, online assessment systems, simulations, educational games, and artificial intelligence-based applications are influencing both the organisation and delivery of education. The significance of digital learning became particularly visible during the COVID-19 pandemic, when schools, colleges, and universities were compelled to adopt remote modes of teaching. The pandemic demonstrated the usefulness of digital platforms in maintaining educational continuity, but it also exposed deep inequalities in access to devices, connectivity, electricity, digital literacy, and appropriate learning environments.

The National Education Policy 2020 recognises the relationship between education and technology as bidirectional. Education prepares individuals to participate in a technology-oriented society, while technology can improve educational processes, expand access, strengthen teacher development, support assessment, and enhance institutional governance. NEP 2020 therefore does not treat digital education as a temporary substitute for classroom teaching. Instead, it places technology within the broader transformation of curriculum, pedagogy, assessment, teacher education, educational administration, and lifelong learning.

The policy nevertheless adopts a cautious position. It acknowledges that emerging technologies such as artificial intelligence, machine learning, adaptive assessment, virtual reality, augmented reality, smart boards, and digital learning platforms can change both what students learn and how they learn. At the same time, it recommends that technology-based interventions should be evaluated rigorously and transparently before being implemented on a large scale. The policy also clearly states that online education cannot produce equitable benefits unless the digital divide is addressed and teachers receive appropriate pedagogical preparation.

This distinction is important because the provision of computers, tablets, smart boards, internet connections, or electronic content does not in itself transform pedagogy. Pedagogy refers to the principles, relationships, strategies, interactions, and assessment processes through which meaningful learning takes place. A teacher may use a digital projector merely to reproduce a conventional lecture, while another teacher may use a simple mobile phone to organise inquiry, peer discussion, collaborative problem-solving, and reflective learning. Therefore, pedagogical transformation depends less on the presence of advanced devices and more on how technology is selected, contextualised, and integrated into learning.

Recent evidence presents both progress and continuing challenges. According to the UDISE+ 2024–25 report, the proportion of schools with computer access increased from 57.2 per cent in 2023–24 to 64.7 per cent in 2024–25. Internet facilities increased from 53.9 per cent to 63.5 per



cent during the same period. These figures indicate substantial improvement, but they also show that a considerable proportion of Indian schools continue to function without essential digital infrastructure. Furthermore, the existence of a computer or internet connection does not necessarily indicate its regular, functional, and pedagogically appropriate use.

ASER 2024 reported that smartphone access among rural children aged 14–16 was close to universal, with almost 90 per cent reporting that a smartphone was available at home. Approximately 82.2 per cent reported knowing how to use a smartphone. However, only 57 per cent of those who could use a smartphone reported using it for an educational activity during the preceding week, whereas 76 per cent reported using it for social media. Smartphone ownership also showed a gender difference: 36.2 per cent of boys, compared with 26.9 per cent of girls, reported owning a smartphone. These findings demonstrate that access, ownership, educational use, digital competence, and online safety are distinct dimensions of the digital divide.

Against this background, the present article analyses the pedagogical potential of digital platforms through the perspective of NEP 2020. It examines how national digital initiatives can support teaching and learning, identifies major implementation challenges, and proposes strategies for making digital transformation equitable, educationally meaningful, and sustainable.

2. Objectives of the Study

The study has the following objectives:

1. To examine the vision of NEP 2020 regarding technology use and digital education.
2. To analyse the pedagogical contributions of major digital educational platforms in India.
3. To identify changes in teaching, learning, assessment, and teacher development enabled by digital platforms.
4. To examine barriers affecting the equitable and meaningful integration of digital technology.
5. To suggest a pedagogy-centred framework for implementing digital education under NEP 2020.

3. Research Questions

The article addresses the following research questions:

1. How does NEP 2020 conceptualise the role of technology in education?
2. In what ways can digital platforms transform conventional pedagogical practices?
3. What national digital initiatives support the implementation of NEP 2020?
4. What challenges restrict the effective use of digital platforms?
5. What measures are required to ensure equitable, inclusive, and pedagogically meaningful digital education?

4. Research Methodology

The present study follows a qualitative, descriptive, and analytical research design. It is a conceptual research article rather than an experimental or survey-based investigation. The analysis is based on secondary sources, including the National Education Policy 2020, the



National Curriculum Framework for School Education 2023, UDISE+ 2024–25 data, ASER 2024 findings, UNESCO's Global Education Monitoring Report on technology in education, and official information relating to DIKSHA, SWAYAM, PM e-VIDYA, SWAYAM PRABHA, NDEAR, and related educational initiatives.

The documents were examined through thematic analysis. The principal themes included access and equity, technology-pedagogy integration, teacher competence, digital content, multilingualism, learner engagement, assessment, inclusion, educational governance, data ethics, and blended learning. Policy provisions were compared with available evidence regarding digital access and technology use.

The study does not claim to measure the direct impact of a particular platform on students' achievement. Instead, it interprets the pedagogical possibilities and limitations of digital platforms within the policy framework of NEP 2020. The conclusions should therefore be understood as analytical and policy-oriented rather than as causal findings from primary empirical research.

5. Conceptual Understanding of Digital Pedagogy

Digital pedagogy should not be understood simply as teaching through electronic devices. It refers to the purposeful integration of technology, subject matter, learning objectives, instructional methods, assessment, and learner characteristics. The Technological Pedagogical Content Knowledge framework explains that effective technology integration emerges from the interaction of technological knowledge, pedagogical knowledge, and content knowledge. Teachers need to understand not only how a digital tool operates but also why, when, and for whom it should be used.

A pedagogy-first approach begins with the intended learning outcome. The teacher identifies what students should understand or be able to perform, selects suitable learning activities, determines the type of interaction required, and then chooses an appropriate digital or non-digital resource. By contrast, a technology-first approach begins with a tool and attempts to fit teaching into its available features. Such an approach often produces visually attractive but educationally weak activities.

Digital pedagogy is also connected with constructivist learning. Learners develop knowledge through participation, inquiry, dialogue, reflection, experimentation, and connection with previous experience. Digital platforms can support these processes by enabling access to diverse sources, simulations, collaborative documents, discussion forums, multimedia representation, and immediate feedback. However, passive viewing of videos or copying material from a screen does not constitute constructivist learning.

The Community of Inquiry model is also relevant to online and blended learning. Meaningful digital learning depends on teaching presence, cognitive presence, and social presence. Teaching presence involves instructional design, facilitation, guidance, and feedback. Cognitive presence refers to the learner's ability to explore, integrate, and apply knowledge. Social presence allows learners to communicate, collaborate, and develop a sense of belonging. Digital learning that



lacks teacher interaction and peer engagement may lead to isolation, disengagement, and superficial completion of tasks.

Therefore, digital pedagogy is fundamentally relational. Technology should extend the teacher's ability to guide learners, provide feedback, organise collaboration, and respond to individual learning needs. It should not reduce education to automated content distribution.

6. NEP 2020 and the Vision of Technology-Enabled Education

NEP 2020 presents technology as an instrument for improving teaching-learning and evaluation, supporting teacher preparation and professional development, enhancing educational access, and streamlining planning, management, and administration. It proposes the establishment of the National Educational Technology Forum as a platform for exchanging ideas, sharing evidence, developing institutional capacity, identifying strategic areas, and supporting research and innovation in educational technology.

The policy emphasises the development of educational software and digital content in major Indian languages. It specifically highlights the use of DIKSHA for curriculum-aligned content and teacher professional development. It also recommends stronger integration of DIKSHA and SWAYAM across school and higher education. User ratings and feedback mechanisms are proposed to improve the quality and usability of digital resources.

Chapter 24 of NEP 2020 focuses on online and digital education and gives particular importance to equity. It recommends investment in open, interoperable, evolvable, and public digital infrastructure. The use of television, radio, community radio, and preloaded devices is encouraged for learners whose internet access is limited. This multimodal approach is significant in India because exclusive dependence on internet-based learning would exclude many students. NEP 2020 also recognises that a competent classroom teacher does not automatically become an effective online teacher. Online pedagogy requires different methods of communication, activity design, learner engagement, assessment, and feedback. The policy accordingly calls for rigorous teacher training in learner-centred pedagogy, online content creation, and the use of digital teaching tools.

Another important provision concerns blended learning. NEP 2020 warns that entirely screen-based education may neglect the social, emotional, physical, experiential, and psychomotor dimensions of learning. It therefore supports models that combine digital resources with face-to-face interaction, practical activities, field experiences, arts, sports, laboratories, and community engagement. The purpose is not to replace classrooms but to make learning more flexible, accessible, and responsive.

The policy further identifies concerns related to data privacy, ethical use of artificial intelligence, device addiction, online assessment, network disruptions, and the limitations of digital modes for practical and performance-based subjects. This balanced perspective distinguishes NEP 2020 from approaches that assume technology is automatically beneficial.



7. Major Digital Platforms Supporting Pedagogical Transformation

7.1 Digital Infrastructure for Knowledge Sharing

DIKSHA is the national digital platform for school education developed under the aegis of the Ministry of Education and NCERT. It has been adopted by States, Union Territories, national boards, and educational bodies. It provides curriculum-linked e-content, textbooks, videos, worksheets, assessments, courses, and teacher-development materials.

One of DIKSHA's important features is its connection with Energised Textbooks through QR codes. Students and teachers can scan a code in a printed textbook to access additional explanations, multimedia content, activities, or assessments. This creates a bridge between print and digital learning and is particularly useful in contexts where students do not continuously remain online.

Pedagogically, DIKSHA can support lesson preparation, remediation, enrichment, self-learning, and professional development. Teachers can select resources according to subject, grade, language, and curriculum. However, meaningful use requires teachers to adapt the resources to local learning needs rather than presenting them without discussion. The effectiveness of DIKSHA therefore depends on content quality, discoverability, language availability, offline access, teacher competence, and alignment with classroom activity.

7.2 SWAYAM

SWAYAM is a national online-learning platform covering courses from the secondary stage to postgraduate education. It is designed around the principles of access, equity, and quality. SWAYAM courses generally follow a four-quadrant model consisting of video lectures, downloadable reading material, self-assessment activities, and online discussion forums.

The platform contributes to pedagogical flexibility by allowing learners to access courses beyond the limitations of their institutions. Students can learn from teachers and institutions located in other parts of the country, undertake interdisciplinary courses, and, under applicable regulations, obtain academic credit. For teachers, SWAYAM can support continuing professional development and exposure to new areas of knowledge.

Its pedagogical value, however, depends on learner support. Online courses with lengthy lectures, limited interaction, weak feedback, or inaccessible language may have low completion and engagement. Institutions should therefore provide mentoring, discussion groups, academic counselling, digital laboratories, and local facilitation for students undertaking SWAYAM courses.

7.3 PM e-VIDYA and SWAYAM PRABHA

PM e-VIDYA brings together digital, online, television, and radio-based educational initiatives to facilitate multimodal access. Its components include DIKSHA, SWAYAM, educational television channels, radio programmes, podcasts, and specialised content for children with disabilities.

The expansion of PM e-VIDYA television channels under the One Class-One Channel initiative is especially relevant for households without reliable broadband connectivity. Television and radio can reach learners through technologies that are more widely available and require lower levels of digital skill. Their limitation is that communication is largely one-directional. This can be



addressed through telephone support, local teacher interaction, worksheets, community learning centres, and periodic face-to-face sessions.

The multimodal principle embodied in PM e-VIDYA is pedagogically important. Equity cannot be achieved by offering the same online platform to every student. Different learners require different combinations of print, television, radio, mobile applications, offline content, assistive technology, and teacher support.

7.4 National Digital Education Architecture

The National Digital Education Architecture is not a single teaching platform. It is a framework of principles, standards, specifications, registries, and interoperable building blocks intended to support the broader digital education ecosystem. Its purpose is to allow different public and private systems to communicate and function together without creating isolated technological structures.

NDEAR has the potential to support student and teacher registries, content exchange, assessment systems, credentialing, educational planning, and data-informed decision-making. Interoperability can reduce duplication and allow locally developed solutions to operate within a national framework.

Nevertheless, greater integration of educational data creates responsibilities concerning consent, privacy, security, data minimisation, transparency, and accountability. Educational data should not be treated merely as an administrative resource. It relates to children, teachers, academic performance, identity, and opportunity. Strong ethical and legal safeguards are therefore essential.

7.5 Virtual Laboratories, Simulations, and Immersive Learning

Virtual laboratories and simulations allow students to observe processes, manipulate variables, repeat experiments, and explore situations that may be expensive, dangerous, or unavailable in their institutions. They are especially useful where physical laboratories are inadequately equipped.

Virtual experiments can prepare learners before physical laboratory work and reinforce concepts afterwards. They cannot, however, completely replace the manipulation of materials, measurement errors, sensory observation, teamwork, and practical discipline developed through physical laboratories. A blended laboratory model is therefore preferable.

Augmented reality and virtual reality can support spatial understanding, historical reconstruction, scientific visualisation, vocational training, and experiential learning. Their adoption must be based on demonstrable educational value rather than technological novelty.

8. Pedagogical Transformations Enabled by Digital Platforms

8.1 From Teacher-Centred Delivery to Learner-Centred Participation

Conventional pedagogy often positions the teacher as the principal source of information. Digital platforms provide learners with access to multiple explanations, demonstrations, documents, experts, and communities. The teacher's role consequently shifts from information transmission towards instructional design, facilitation, mentoring, questioning, and feedback.



This shift does not diminish the teacher's importance. On the contrary, the abundance of online information makes professional guidance more necessary. Students need support in evaluating sources, identifying misinformation, making conceptual connections, and applying knowledge ethically.

8.2 Personalised and Differentiated Learning

Students differ in their prior knowledge, learning speed, language, interests, and support needs. Digital platforms can provide multiple representations of a concept through text, audio, animation, video, diagrams, and simulations. Teachers can assign remedial resources to some learners and enrichment activities to others.

Learning analytics may help teachers identify patterns of participation, misconceptions, and incomplete work. However, personalisation should not be reduced to automated recommendations. Human interpretation is required because low participation may result from disability, device sharing, language difficulty, household responsibilities, or poor connectivity rather than lack of ability.

8.3 Blended and Flipped Learning

In a blended model, digital and face-to-face learning are deliberately combined. Students may view a short explanation or access introductory material before class, while classroom time is used for discussion, problem-solving, experiments, peer learning, and application. This flipped approach can make classroom interaction more meaningful.

Blended learning must remain flexible. Requiring every learner to watch online content at home can disadvantage students without personal devices or quiet study spaces. Schools may therefore provide downloadable resources, printed alternatives, community access points, or time within the school schedule.

8.4 Collaborative and Inquiry-Based Learning

Digital discussion forums, shared documents, interactive maps, virtual laboratories, and collaborative presentation tools allow students to investigate questions and construct knowledge collectively. Learners can collect local data, compare results, receive peer feedback, and present findings to audiences beyond the classroom.

Such activities support communication, creativity, critical thinking, and problem-solving. However, collaboration requires carefully defined roles, meaningful questions, teacher monitoring, and individual accountability. Merely placing students in an online group does not guarantee productive collaboration.

8.5 Continuous and Formative Assessment

Digital platforms can support low-stakes quizzes, diagnostic tests, portfolios, peer assessment, rubrics, and immediate feedback. These methods can help teachers identify learning gaps before final examinations.

Technology-based assessment should measure understanding, reasoning, creativity, and application rather than only factual recall. Excessive dependence on automatically graded multiple-choice questions may narrow the curriculum. Essays, projects, oral explanations,



experiments, performance tasks, and classroom observation should remain part of a balanced assessment system.

8.6 Multilingual and Inclusive Learning

Digital platforms make it technically possible to provide content in multiple languages and formats. Audio narration, captions, sign-language videos, screen-reader compatibility, adjustable text, transcripts, and simplified navigation can support learners with diverse needs.

Multilingual digital education is central to NEP 2020 because language influences comprehension, identity, and participation. Translation alone may be insufficient; content should reflect local examples, cultural contexts, and familiar experiences. Inclusive design should be incorporated from the beginning rather than added after a platform has been developed.

8.7 Teacher Professional Development

Digital platforms can provide flexible and continuous professional learning through courses, webinars, communities of practice, demonstration lessons, and resource sharing. Teachers can learn without prolonged absence from their schools.

Effective professional development should move beyond training in basic operations such as opening applications or preparing presentations. It should develop competence in instructional design, digital assessment, inclusive content, online facilitation, cybersecurity, media literacy, copyright, and ethical use of artificial intelligence. Teachers should also receive school-level mentoring and technical assistance so that training is translated into classroom practice.

9. Challenges in Implementing Digital Pedagogy

9.1 Digital Inequality

The digital divide includes access to electricity, functional devices, affordable data, reliable connectivity, technical support, suitable learning spaces, and digital competence. Household-level smartphone availability may conceal device sharing among family members. Girls, rural learners, children with disabilities, migrant families, and economically disadvantaged students may experience different forms of exclusion.

The UDISE+ 2024–25 figures show improvement in school-level access, but more than one-third of schools still lacked computer or internet facilities. Even in connected schools, bandwidth, maintenance, device availability, and classroom scheduling may limit actual use.

9.2 Teacher Preparedness and Workload

Many teachers use messaging applications and presentation software but have limited experience in designing interactive digital learning. A short technical workshop cannot develop comprehensive digital pedagogical competence.

Digital education may also increase workload through content preparation, online communication, data entry, assessment, and the expectation of constant availability. Technology should simplify teachers' work rather than create parallel administrative burdens.



9.3 Quality and Contextual Relevance of Content

The quantity of digital content has expanded rapidly, but quality varies considerably. Some resources contain factual errors, poor language, inaccessible design, excessive animation, cultural bias, or weak alignment with learning outcomes.

Digital repositories require transparent review, regular updating, curriculum mapping, user feedback, and quality standards. Teachers should be encouraged to contextualise resources rather than treating centrally produced material as universally applicable.

9.4 Passive Screen-Based Learning

Digital education may reproduce lecture-based pedagogy in electronic form. Long videos, copied notes, and repetitive quizzes can reduce learners to passive consumers. Excessive screen exposure may also affect attention, physical activity, sleep, and social interaction.

Digital learning should therefore include observation, conversation, writing, drawing, experimentation, physical movement, arts, community investigation, and practical work. Technology should initiate or enrich activity, not occupy the entire learning process.

9.5 Data Privacy, Commercialisation, and Algorithmic Bias

Digital platforms collect information about identities, participation, performance, behaviour, and preferences. Without safeguards, such data may be misused, exposed, commercially exploited, or interpreted through biased algorithms.

Educational institutions require clear rules regarding data collection, consent, storage, sharing, retention, and deletion. Decisions affecting students should not be made solely through opaque automated systems. Public educational objectives must remain more important than commercial interests.

9.6 Language and Accessibility Barriers

Although India has a rich linguistic diversity, high-quality digital content remains unevenly distributed across languages. Automatic translation may fail to communicate subject-specific meaning and cultural nuance.

Many platforms also remain difficult to use for learners with visual, hearing, cognitive, or motor disabilities. Accessibility standards, assistive technologies, captions, transcripts, sign-language interpretation, audio description, and keyboard navigation should be mandatory components of platform design.

9.7 Weak Evidence of Educational Impact

Digital initiatives are often evaluated through numbers of registrations, downloads, logins, devices distributed, or courses completed. These indicators do not necessarily demonstrate improved understanding, participation, equity, or wellbeing.

NEP 2020 appropriately calls for pilot studies and evidence-based scaling. Evaluation should examine who participates, who is excluded, how teachers use the platform, whether learning improves, and whether benefits justify financial and social costs.



10. Recommendations

First, digital education should follow a pedagogy-first model. Every technological intervention should be connected with clearly defined learning outcomes, instructional strategies, assessment methods, and learner needs.

Second, universal digital infrastructure should be treated as an educational entitlement. Schools require electricity, reliable connectivity, functional devices, projectors or displays where appropriate, maintenance budgets, and technical support. Shared community digital-learning facilities can support students who lack home access.

Third, teacher capacity building should be continuous, practice-based, and subject-specific. Training should incorporate lesson design, blended learning, digital assessment, inclusive education, media literacy, cybersecurity, artificial intelligence, and the creation of multilingual resources. Teachers should be given time, recognition, and institutional support to develop and share digital practices.

Fourth, platforms should support offline and low-bandwidth use. Downloadable content, QR-linked resources, television, radio, printed materials, local servers, and preloaded devices should remain part of the national strategy. Multimodal delivery is necessary for equity.

Fifth, digital content should be developed in Indian languages and local contexts. Teachers, universities, SCERTs, DIETs, community experts, and students should participate in content creation and review. Open educational resources can encourage adaptation, translation, and sharing when supported by suitable licensing and quality assurance.

Sixth, accessibility should be built into all platforms. Universal design principles, captions, transcripts, audio descriptions, screen-reader compatibility, Indian Sign Language resources, adjustable interfaces, and alternative assessment formats should be implemented systematically.

Seventh, digital assessment should remain formative and balanced. Analytics may assist teachers, but they should not replace professional judgement. Portfolios, projects, oral tasks, practical work, and collaborative activities should complement automated tests.

Eighth, educational data governance should be transparent and rights-based. Institutions should collect only necessary data, explain its purpose, protect it securely, and provide mechanisms for correction and accountability. Children's data require particularly strong protection.

Ninth, schools and higher education institutions should establish digital pedagogy support units or mentoring networks. These units can assist teachers with instructional design, accessibility, copyright, platform use, and technical difficulties.

Finally, evaluation should move from counting access to examining educational value. Independent studies should investigate learning outcomes, inclusion, teacher workload, cost-effectiveness, learner wellbeing, and unintended consequences. Successful pilots may then be adapted and scaled according to local conditions.

11. Discussion

The analysis demonstrates that NEP 2020 offers a balanced and educationally sound foundation for digital transformation. It recognises both the potential of technology and the risks of uncritical



adoption. The policy's emphasis on evidence, equity, teacher preparation, multilingual content, open infrastructure, blended learning, and ethical awareness remains highly relevant.

India's national platforms have created a significant public digital-education ecosystem. DIKSHA links curriculum, textbooks, teacher education, and digital content. SWAYAM expands access to courses and supports flexible learning in higher education. PM e-VIDYA combines internet, television, radio, and accessible content. NDEAR provides a framework for interoperability and innovation. Together, these initiatives can reduce geographical limitations and make high-quality resources more widely available.

Nevertheless, platform availability cannot be equated with pedagogical transformation. The most important unit of change remains the interaction among the learner, teacher, curriculum, and social context. A platform becomes educationally meaningful when a teacher uses it to provoke inquiry, provide feedback, support inclusion, connect learning with experience, and enable students to create knowledge.

The distinction between digitisation and transformation is therefore essential. Digitisation converts existing material into electronic form. Digitalisation reorganises processes through technology. Digital transformation changes the underlying culture, relationships, and purposes of education. NEP 2020 will produce genuine transformation only when digital platforms help move education away from memorisation and standardised content delivery towards competency, understanding, creativity, collaboration, and responsible participation.

12. Conclusion

Digital platforms have the capacity to expand access, diversify learning resources, strengthen teacher development, support formative assessment, promote multilingual education, and connect learners with wider knowledge communities. NEP 2020 provides a comprehensive framework for using these possibilities to improve educational quality and equity.

However, technology is neither a neutral instrument nor an automatic solution. Its educational value depends on infrastructure, teacher competence, content quality, learner support, accessibility, ethical governance, and contextual relevance. Unequal access, passive screen-based instruction, linguistic exclusion, commercial influence, and misuse of educational data can reproduce or intensify existing inequalities.

The transformation of pedagogy must therefore be guided by educational purposes rather than technological enthusiasm. Digital platforms should complement teachers, classrooms, laboratories, libraries, communities, and lived experience. They should create opportunities for inquiry, interaction, creativity, reflection, and inclusion.

The central insight emerging from NEP 2020 is that the future of education is not exclusively online or offline. It is a carefully designed, equitable, human-centred, and blended ecosystem in which technology strengthens the professional agency of teachers and the active participation of learners. India's digital-education initiatives can achieve their transformative potential when every learner is able not merely to access digital content but to use it critically, creatively, safely, and meaningfully.



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