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The Role of Technology in NEP 2020

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Abstract: The National Education Policy (NEP) 2020 places a strong emphasis on integrating technology into India's education system to improve accessibility, equity, and quality. Key aspects include the development of digital infrastructure to bridge educational gaps, particularly in rural and underserved areas. The policy promotes online learning platforms like SWAYAM and DIKSHA, and focuses on teacher training to ensure educators can effectively incorporate digital tools into their teaching. Virtual labs and simulations are introduced as vital tools, especially in STEM fields, allowing students to conduct experiments and engage in hands-on learning remotely. These platforms also support multidisciplinary education, encourage critical thinking, and reduce costs associated with physical infrastructure.

In addition, educational apps and digital resources are central to enhancing learning. The policy encourages the creation of open educational resources (OER) and the integration of digital tools into the curriculum to support personalized learning. Apps are also designed to assist in teacher training, including the use of local languages to improve accessibility and inclusivity.

The use of AI and data analytics is a key focus of NEP 2020. These technologies are expected to improve assessment techniques, enhance personalized learning, and support data-driven decision-making in educational planning and administration. Assessment methods shift from traditional exams to continuous and formative evaluations, enabled by digital tools. This allows for real-time feedback, adaptive assessments, and gamification, making learning more interactive and personalized.

Ultimately, NEP 2020 aims to create a more inclusive, tech-driven educational system by integrating digital infrastructure, teacher training, and advanced technologies to enhance learning outcomes, access, and skills development across the country.

Keywords: Digital Infrastructure, National Education Policy (NEP) 2020, Technology in Education, Rural Education, Inclusive Education, Virtual Learning Platforms, DIKSHA, NROER, Teacher Training, Digital Tools for Teaching





