



Digital India: Educational Initiatives Taken by the Government of India

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Abstract

Digital transformation has significantly reshaped the education system in India, particularly under the flagship *Digital India* initiative of the Government of India. This article examines the major educational initiatives launched to promote digital learning, enhance accessibility, and ensure quality education such as SWAYAM, DIKSHA, the National Digital Library of India (NDLI), and PM eVIDYA provide free digital resources and support online learning. Programs like NISHTHA focus on teacher training, while Virtual Labs and SWAYAM Prabha (DTH channels) extend reach to rural and remote areas. The COVID-19 pandemic significantly accelerated the adoption of these ICT tools, online platforms, DTH channels, and digital repositories, the Government of India has taken comprehensive steps toward building an inclusive, flexible, and technology-driven education ecosystem. Digital initiatives under Digital India are reshaping traditional education, fostering an accessible, learner-centric, and sustainable system in line with the objectives of NEP 2020.

Keywords: Digital Education, SWAYAM, COVID-19, NEP-2020, Online

1. Introduction

Digital education, also known as digital learning, is a form of learning supported by digital technology and instructional practices that effectively use technological tools. It takes place across all learning areas and domains (Begum, 2024). Digital education provides win-win opportunities for all stakeholders. Schools, colleges, and institutions benefit from increased enrolments and additional revenue, while students gain a flexible alternative that allows them to study at their own pace and convenience (Tiwari and Sahoo 2025). Teachers and professors also find it easier to design teaching plans with the support of digital tools. Learning becomes smoother and more engaging through animations, gamification, and audio-visual content (Das & Sarkar, 2025). In recent years, digital education in India has grown rapidly, transforming the way students understand concepts and theories (Varun, 2023). The

traditional chalk-and-talk method is gradually being replaced by more interactive approaches as institutions increasingly adopt digital solutions (Varun 2023; Venuturumilli & Prasada, 2019).

The COVID-19 pandemic, lockdowns, and quarantine further accelerated this shift. During the crisis, digital technologies helped keep the education system functioning, enabling students to learn from home (Chattopadhyay, 2025; Ahmed 2022). Technology integration enhances engagement, making learning more interesting and reducing distractions (Dua, 2025; Chattopadhyay, 2025). The use of projectors, computers, and modern digital equipment makes classroom learning more dynamic through activities such as group participation, oral presentations, and technology-based tasks (Dua, 2025).

Digital learning also ensures more participation, as today’s generation of students are familiar with laptops, tablets, and smartphones. Several private players such as Educomp, Tata Class Edge, Pearson, and Teach Next are continuously developing interactive software to support teachers and improve classroom teaching (Sakti, 2023; Srideviponmalar et al., 2022; Muthuswamy, 2022).

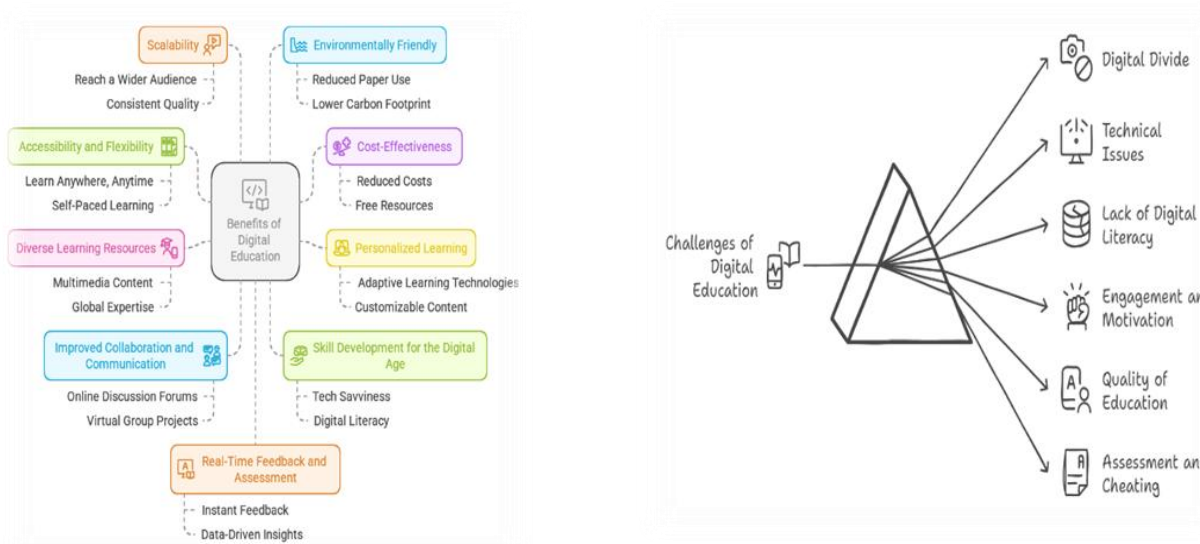


Figure 1: Benefits and Challenges of Digital Education

Educational initiatives under digital india

1. **SWAYAM:** Study Webs of Active Learning for Young Aspiring Minds (SWAYAM) is a massive open online course (MOOC) platform launched by the Ministry of Education on July 9, 2017 with three cardinal principal of Education Policy they are access, equity and quality. It offers free online courses from school



education to higher education and skill development. SWAYAM provides equitable access to higher education for diverse student populations, particularly targeting rural youth aged 18 to 35 who face barriers in pursuing educational opportunities. By leveraging information technology and innovative online learning platforms, SWAYAM aspires to foster an inclusive learning environment that encourages active participation and skill development among learners (**Pravat and Sudhir 2025; Panda et al., 2019; Mendez et al., 2019**). The main objective of SWAYAM is to provide free and equitable access to quality education through digital learning, enabling students and learners across India to study anytime and anywhere (**Agnihotri and Pandit 2021; Lahiry 2019**).

2. **SWAYAM Prabha:** SWAYAM Prabha was officially launched on 7 July 2017 by the Government of India as a group of 34 Direct-to-Home (DTH) television channels dedicated to providing high-quality educational content to students across India. It is part of the Digital India initiative and is managed by the Ministry of Education, Government of India. The program aims to cater to learners from school education (class 9 to 12) to higher education (undergraduate, postgraduate, and professional courses) and even competitive exams like UPSC, JEE, NEET, and more. The main objective of SWAYAM Prabha is to provide free, high-quality educational content through Direct-to-Home (DTH) satellite channels across India, especially reaching remote and internet-poor areas, so that students and learners can access curriculum-based learning without needing internet connectivity (**Lahiry, 2019; Mendez et al., 2019; Chattopadhyay, 2025**).
3. **DIKSHA:** Digital Infrastructure for Knowledge Sharing was formally launched on 2 September 2017 as a comprehensive platform for teachers, students, and parents to facilitate digital learning and teaching resources across India in multiple languages. It is part of the National Mission on Education through Information and Communication Technology (NMEICT) and is aligned with the National Education Policy (NEP) 2020. The platform is designed to support school education (from primary to higher secondary levels) and teacher training programs (**Kar, 2023; Azeem, 2023**).
4. **National Digital Library of India:** The National Digital Library of India (NDLI) was officially launched on 19 June 2018 by the Ministry of Education, Government of India. NDLI is a virtual platform that aggregates a vast collection of learning materials such as books, articles, theses, video lectures, audiobooks, and other educational content from multiple national and international digital libraries and institutions. It is managed by the Ministry of Education, India, and developed and maintained by IIT Kharagpur. NDLI aims to provide free access to quality educational resources for all, promote lifelong learning, support academic and



research needs, bridge the digital divide for remote learners, and preserve India’s educational and cultural knowledge through digitization (**Bashir et al., 2019; Bhowmick et al., 2022**).

5. **e-Pathshala:** e-Pathshala was launched in 7 November 2015 by the Ministry of Human Resource Development in collaboration with NCERT and CIET as part of the Digital India initiative. The main objectives of e-Pathshala are to provide free and easy access to digital educational resources (including NCERT textbooks, videos, audios, and other learning materials) for students, teachers, parents, and educators; to support learning anytime and anywhere through web and mobile platforms; to enhance the quality of teaching and learning; and to help bridge the digital divide by ensuring equitable availability of curriculum-aligned digital content (**Sharma and Baliya 2023**).
6. **PM eVIDYA:** Launched in 17 May 2020, PM eVIDYA is a comprehensive initiative to promote digital education in India. It integrates multiple platforms, including DIKSHA, SWAYAM, and e-Pathshala, under one umbrella. The program also includes 12 dedicated TV channels (one for each class) to ensure continuity of education during disruptions like the COVID-19 pandemic. This initiative is part of the broader Atmanirbhar Bharat Abhiyaan (Self-Reliant India Movement) and seeks to unify digital and on-air educational resources for over 250 million school-going children nationwide (**Chattopadhaya 2025; Kar 2023**).
7. **NISHTHA:** National Initiative for School Heads’ and Teachers’ Holistic Advancement was launched on 21 August 2019 by the Ministry of Education, Government of India as a national mission to improve the quality of school education through teacher training. The main objective of NISHTHA is to strengthen and enhance the professional skills and capacities of school teachers, heads, and educational administrators through integrated training programmes, thereby improving teaching practices and learning outcomes for students across India (**Kalyani, 2024**).
8. **National Digital Educational Architecture (NDEAR):** The National Digital Educational Architecture (NDEAR) was launched in 29 July 2021 by the Ministry of Education, Government of India, under the Digital India initiative as part of the National Education Policy (NEP) 2020. The main objective of NDEAR is to develop a unified national digital infrastructure for education that supports online learning, improves access to digital resources, and enables seamless integration of educational platforms and services across India (**Gawande, 2024; Gite, 2024**).



9. **National Scholarship Portal (NSP):** The National Scholarship Portal (NSP) was launched by the Government of India on 2016 as a mission-mode project under the National e-Governance Plan to streamline scholarship processes through a digital platform. Launched by the Ministry of Electronics and Information Technology (MeitY), NSP serves as a one-stop platform for students to apply for various scholarships offered by the central and state governments in a simplified, transparent, and efficient manner, with funds being directly transferred to beneficiaries' bank accounts (Lifna *et al.*, 2024; Samu., *et al.*, 2024)
10. **Virtual Labs** Launched in 2010, an initiative of the Ministry of Education (formerly MHRD), Government of India under the National Mission on Education through ICT (NMEICT). To provide online access to laboratory experiments for science and engineering students, especially where physical labs are not available (Suryavanshi, 2024; Mor, 2024).

Conclusion

Digital education in India has transformed under the Digital India initiative through strategic technology integration. The Government has introduced a wide range of platforms to ensure access and equity across all levels. SWAYAM and SWAYAM Prabha support online learning; DIKSHA and e-Pathshala strengthen school resources; the National Digital Library of India (NDLI) facilitates lifelong learning; PM eVIDYA ensured educational continuity during crises; NISHTHA enhances teacher training; NDEAR provides a unified digital framework; the National Scholarship Portal (NSP) streamlines aid distribution; and Virtual Labs overcome physical infrastructure gaps. These initiatives have contributed to reducing educational inequalities, promoting inclusive learning, and supporting skill development across India. While challenges like the digital divide and infrastructure gaps persist, continued expansion of these platforms demonstrates a strong commitment to a resilient, future-ready system. Ultimately, Digital India's educational initiatives play a pivotal role in achieving the vision of equitable, accessible and quality education for all.

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