Digital Education in India

Digital Education in India is the way forward to learning and gaining knowledge through the means of technology and digital devices.

What is Digital Education in India?

Digital Education is a technique or method of learning which involves technology and digital devices. This is a new and broad technical sphere which shall help any student attain knowledge and gain information from any corner across the country. It is believed that Digital Education in India is the future of education and learning.

Various channels have been defined by the Government of India for a widespread of the sources and means to provide education to different corners of the country. Discussed further in this article are the channels and initiatives taken up by the Government for Digital Education in India.

Aspirants can also know the advantages, objectives and challenges of the Digital India campaign launched by the Government of India at the linked article.

Ministry of Human Resources Development (MHRD) – Initiatives for Digital Education

1. A comprehensive initiative called PM eVidya was announced on May 17, 2020, which aims to unify all efforts related to digital/online/on-air education to enable equitable multi-mode access to education.
2. It is envisaged that it will benefit nearly 25 crore school going children across the country.
3. One of the most important initiatives of MHRD is DIKSHA (Digital Infrastructure for Knowledge Sharing).

UPSC aspirants can also know in detail about the various Government Schemes in India at the linked article.

DIKSHA (Digital Infrastructure for Knowledge Sharing) : e-Learning

1. As part of PM eVidya announced under the Atma Nirbhar Bharat programme, DIKSHA is the 'one nation; one digital platform' for school education in India.
2. It was launched in 2017
3. It is a national platform available for schools in all states
4. DIKSHA is available for grades from 1 to 12.
5. DIKSHA can be accessed through mobile application and web portal.

DIKSHA (Digital Infrastructure for Knowledge Sharing) – What Does it Contain?

1. Courses for Teachers, quizzes and others
2. Lots of e-content will be provided which are aligned with the curriculum. Large number of case studies and solutions will be provided with the help of Energised Textbooks (ETB's) which are QR

     coded.
3. VidyaDaan was launched in April, 2020.
4. It is a content contribution program at national level, that makes use of the DIKSHA platform and tools, it allows donation or contribution of e-learning resources for school education by experts, private bodies, and educational bodies.

Swayam Prabha – TV Channels

1. This mode of education is for people who do not have access to education.
2. High quality educational programmes are telecasted.
3. There are a total of 32 channels to meet the requirements.
4. Different channels are used for higher education and school education.
5. The Department of School Education and Literacy also tied up with private DTH operators like Tata Sky & Airtel to air educational video content to enhance the reach of these channels.
6. Number of TV channels for school education will increase from 5 to 12 to transform into 'one class, one channel', that is, one channel each for all grades from 1 to 12 channels.
7. To ensure asynchronous usage at any time, anywhere, and by anyone, the same content will be organised by chapter & topics on DIKSHA.

To know more about SWAYAM – Study Webs of Active Learning for Young Aspiring Minds, candidates can visit the linked article.

E-textbooks

1. **e-Pathshala** mobile app (Android, iOS, Windows), and web portal can be used to access e-textbooks.
2. It can be accessed by students, teachers and parents.
3. 3,500 pieces of audio and video content of NCERT are available.
4. It is available in different languages – English, Sanskrit, Urdu, Hindi.

For the differently-abled

1. For hearing impaired students, one DTH channel is available with sign languages.
2. Study material has been developed in Digitally Accessible Information System (DAISY), for hearing and visually impaired.

Radio Broadcasting

1. The radio broadcasts focus on activity-based-learning.
2. For broadcasting content related to National Institute of Open Learning – NIOS (grades 9 to 12), 289 community radio stations have been used.
3. This mode of education is particularly useful for students who are living in remote areas, particularly for grades 5 to 1.
4. Shiksha Vani is a Podcast of the Central Board for Secondary Education (CBSE)
5. Shiksha Vani is used by learners of grades 12 to 9.
6. There are more than 430 pieces of audio content for all subjects from grade 12 to 1, in Shiksha Vani.

Related Links

Standup India	Digital Divide In India
Make In India	E-Governance and its Significance
Atmanirbhar Bharat Abhiyan	Digital Locker

Digital Education in India – Way Forward

1. Developing quality e-content in local languages, to address the diversity of Indian languages.
2. Addition of skill development courses, virtual labs, virtual vocational training.
3. Framing of Online/Digital Education Guidelines addressing the digital divide.
4. Developing digital classrooms by integrating education systems and technology.
5. Developing framework for assessments in the era of digital education.
6. Making sure of coherent user experience by multi-mode access to education through Mobile apps, web portals, TV channels, radio, podcasts.
7. To enable "anytime, anywhere" access and increase penetration, focus will be on increasing usage of mobile phones.
8. Priority for providing complete access to anytime, anywhere e-content and e-infrastructure is for all learners in schools; however, e-content is being developed with slightly varied priorities – Grades 12 to 9 covering 6.3 crore children will be the top most priority. The next in the table of priority will be from grades 8 to 6 covering students strength of 6.4 crore children. For grades 5 to 1, the priority will be on numeracy and foundational literacy.
9. To leverage e-learning resources, teachers will be up-skilled.

Advantages of Digital Education in India

During 2019-20 when India and the entire world were fighting the COVID-19 pandemic, Digital Education in India was the sole source of learning for the students in the country. Discussed below are a few other benefits of Digital Education in India:

- This initiative has made students not just gain bookish information but also gain practical and technical knowledge
- No limitation as to the place of learning or studying. With digital learning, a student can engage in online classes or learning anywhere, at any time
- With study material available online, students can take their time to understand any topic
- Through the mode of digital education, learning can be made more engaging and interactive between the students and teachers

It is also important that Digital Education acts as a supplement and does not completely overpower physical education.

Challenges with Digital Education in India

A lot of technology-based adaptations will have to be encountered by the Government to ensure that digital education can be reached out to students across the country. Given below are a few major challenges with Digital Education in India:

- Availability of internet connection to all is one of the biggest requirements for digital education. This

will have to be achieved by the Government for easy access to information
- Providing the devices and technology to the people belonging from socio-economically weak sections so that they are not deprived of education
- Training teachers is another challenge. Only when the teachers are technically sound, they can conduct the digital classes
- Making digital cost-effective should be a key motive of the Government
- To ensure that Government schools and colleges are provided with proper facilities for digital classrooms

With multiple initiatives taken up in the year 2020 for the improvisation and accessibility of Digital Education in India, the Government aims to acknowledge online or e-learning for students broadly.

Relevant Links

National Policy on Education (NEP 2020)	Gist of Yojana February 2020 Issue: Innovation in Education
State of School Education in India [UPSC Notes for GS I]	Education Agenda for New India: RSTV – The Big Picture
Right to Education Act (RTE)	Measures for Inclusion in Higher Education for Equitable Society
Indian Polity Questions in UPSC Mains General Studies Paper – 2	Indian Society Old Questions in UPSC Mains General Studies Paper – 1
Current Affairs	UPSC Mains General Studies Paper 1 Syllabus, Strategy & Structure