

## DIGITAL EDUCATION; A POSITIVE PACE TOWARDS NATIONAL DEVELOPMENT: A REVOLUTIONARY STEP

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### Abstract

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Digital education also known as digitally equipped teaching-learning is the innovative incorporation of modern technology and digital tools to assist the progress of teaching and learning. In another way known as Technology Enhanced Learning (TEL) or e-learning. Exploring the use of digital technologies gives educators the opportunities to design engaging learning in the courses they teach, and these can take the form of blended or fully online courses and programmes. Especially after COVID-19, in the field of education so many sudden changes were accruing, in that time digital teaching-learning providing an opportunity for more in-depth discussion during the face-to-face time spent in outside the class. India is well-progressing towards digital education, backed by rising adoption of digitisation by universities and colleges, increasing internet penetration and soaring demand from students as system of education updating. Online learning offers many assistances for students, including the chance to study flexibly and from a location that suits. The Near Future Teaching project has been collaborating with staff and students to co-design the future of digital education, this is revolutionary step in the field of Education and positive step towards national development.

Indian government distinct on designing online education programmes, strengthening digital infrastructure across the country and regaling to the rising demand for upskilling among students. Digital education has been significantly driven by the government and focus on strengthening digital infrastructure in the country, including providing internet connectivity in the remote areas. It is a positive sign of development towards digital India. As part of 'Digital India' initiative, the government also started e-Education ingenuity to provide online education in remote and urban areas using smartphones, apps and internet services. Farther, amid the pandemic, the Indian government has taken several beginnings (e.g., PM eVIDYA programme, DIKSHA, etc.) to make it at par with some global online education best practices and modify regulations for universities and colleges to offer extended online and distance learning occasions to students. The NEP-2020 asserts that the focus of integration of digital technologies would be to improve teaching-learning and evaluation processes, support teacher professional development, enhance educational access, as well as streamline educational planning and administration.

**Keywords:** Digital Education, National Development, Revolutionary Development, Digital India, e-Education and National Education Policy-2020.



### **Introduction:**

The Covid-19, pandemic outbreak has disrupted students' lives, pushed out many, and stalled classes and examinations across the country. Make sure students do not miss out on studies; classes shifted to online mode. It's like schools shifted to mobile (Online). With the pandemic forcing the teaching and learning process to migrate to the online mode, the education system has faced an upheaval like never before. Many of the students have been left clutch to their phones and computer screens.

Therefore, this shift to the e-learning system has sparked a debate on whether it helped the students to learn or has impeded their progress, social and emotional well-being, and more importantly if this is indeed education.

### **Digital Education:**

- Digital education is the ingenious use of digital instrument and technologies during teaching and learning and is often referred to as Technology Enhanced Learning (TEL) or e-Learning.
- Inspect the use of digital technologies gives educators the opportunity to design engaging learning opportunities in the courses they teach, and these can take the form of blended or fully online courses and programs.

### **Government Initiatives for Smooth Conduct of E-Learning:**

- Many innovations have been taken to enable online education in India, such as:
  - ✓ **E-PG Pathshala:** Associate initiative of the Ministry of Human Resource Development to supply e-content for studies.
  - ✓ **SWAYAM:** It provides for associate integrated platform for on-line course.
- **NEAT:** It aims to use computer science to create learning additional customized as per the wants of the learner.
- Other initiatives include: **National Project on Technology Enhanced Learning (NPTEL)**, **National Knowledge Network, (NKN)**, and **National Academic Depository (NAD)**, among others.
- **PRAGYATA:** The Ministry of Human Resource Development (MHRD) released guidelines on digital education titled PRAGYATA.

- ✓ Under the PRAGYATA guidelines, only 30 minutes of screen time per day for interacting with parents is recommended for kindergarten, nursery and pre-school.
- ✓ Schools can hold live online classes for a maximum of 1.5 hours per day for Classes 1-8, and 3 hours per day for Classes 9-12.

#### **National Programme on Technology Enhanced Learning:**

- ✓ The NPTEL is a project of MHRD initiated by seven Indian Institutes of Technology (IIT), along with the Indian Institute of Science Bangalore.
- ✓ It was created in 2003 to provide online education.
- ✓ The aim was to have web and video courses in engineering, sciences, and management.

#### **Technology as a Saviour:**

- ❖ **Flexibility:** Online education enables both the teacher as well as the students to set their own learning pace plus provides the flexibility of setting a schedule that fits everyone's agenda. Consequently, providing a better work-study balance.
- ❖ **A Wide Range of Courses:** In a space as vast and wide as the internet, infinite skills and subjects are there to teach and learn.
  - A growing number of universities and higher education schools are coming forward to offer online versions of their programs for various levels and disciplines.
- ❖ **More Cost-Effective than Conventional Learning:** Lesser monetary investment is there with better results.
  - With the online mode of learning, the money spent on study materials along with commute charges is considerably less.
- ❖ **A Comfortable Learning Environment:** Online learning allows students to work in the environment that best suits them.

#### **The Other Side of the Coin**

- ❖ **Lack of a Healthy Learning Environment:** Education is not just about classes but interactions, broadening of ideas, and free-flowing open discussions.
  - Students learn more from each other while engaging in challenging collective tasks and thinking together.
  - There is substantial learning that is lost when education goes online. Staring at a screen prevents them from using their mind and acting as remote receptors of what is beamed.

- ❖ **Lack of Technology Access:** Not everyone who can afford to go to school can afford to have phones, computers, or even a quality internet connection for attending classes online.
  - Due to this, the mental stress that students have to undergo is very high.
- ❖ **In Contradictory with Right to Education:** Technology is not affordable to all, shifting towards online education completely is like taking away the Right to Education of those who cannot access the technology.
  - Moreover, the National Education Policy that talks about the digitization of education is also in contradiction with the right to education.
- ❖ **Health - Eye issues:** Younger students, especially in classes 1 to 3 were most likely to suffer from eye-health issues due to staring at the computer or mobile screen for extended periods.
  - Other health issues like neck and back pain etc. due to bad posture and lack of movement have been noticed in older students.

#### **Way Forward:**

- ❖ **A Multi-Pronged Approach:** Flexible rescheduling the academic timetable and exploring options in collaboration with schools, teachers, and parents for providing access to education to a larger section of students.
  - Staggering teacher-student interactions in physical mode with not more than 50% of the total strength attending schools on alternate days.
  - Giving priority to the less advantaged students who do not have access to e-learning.
  - Genuine efforts must be invested to ensure every child gets good quality equitable education as a fundamental right.
- ❖ **Making Online Education More Effective:** Shorter but quality discussions rather than long hours of monotonous sitting and one-way communication should be preferred.
  - The teacher's role has to go beyond just being in control of the class to being a facilitator for the transfer of knowledge.
- ❖ **Focussing more on Knowledge Aspect:** Education is not about competence but more about motivation. The students are meant to discover not just cover the syllabus.
  - The system should not just heartlessly push the students and teachers in only finishing the course regardless of any gain of knowledge, stress should be upon quality learning and not quantity cramming.

## **Why Online Learning is the Future of Education:**

The concept of traditional education has changed radically within the last couple of years. Being physically present in a classroom isn't the only learning option anymore not with the rise of the internet and new technologies, at least. Nowadays, you have access to a quality education whenever and wherever you want, as long as you can get online. We are now entering a new era the revolution of online education.

There's no need to discount the skepticism surrounding education through the internet. It's hard to understand the notion of leaving behind the conventional classroom, especially if it's to face this vast space called The Internet.

### **1. Flexible.**

Online education enables the teacher and the student to set their own learning pace, and there's the added flexibility of setting a schedule that fits everyone's agenda. As a result, using an online educational platform allows for a better balance of work and studies, so there's no need to give anything up. Studying online teaches you vital time management skills, which makes finding a good work-study balance easier. Having a common agenda between the student and teacher can also prompt both parties to accept new responsibilities and have more autonomy.

### **2. Offers a wide selection of programs.**

In a space as vast and wide as the internet, there are infinite skills and subjects to teach and learn. A growing number of universities and higher education schools are offering online versions of their programs for various levels and disciplines. From music composition to Science, there are options for every type of student. Studying your program online is also a great option for getting an official certificate, diploma, or degree without physically setting foot on a university campus.

### **3. Accessible.**

Online education enables you to study or teach from anywhere in the world. This means there's no need to commute from one place to another, or follow a rigid schedule. On top of that, not only do you save time, but you also save money, which can be spent on other priorities. The virtual classroom is also available anywhere there's an internet connection, and a good way to take advantage of this is to travel. For example, if you're studying abroad and want to get a job, online education is a great choice. There's no reason to give up on working or studying while exploring new and exotic places.

#### **4. Allows for a customized learning experience.**

We've mentioned before how flexibility can help you to set your own study pace. But online education is also flexible for each student's individual requirements and level of ability. Online classes tend to be smaller than conventional class size. Most of the time, online learning platforms only allow one student at a time, and in almost all cases, this allows for greater interaction and more feedback between you and your tutor. There's often access to very diverse material such as videos, photos, and eBooks online as well, and tutors can also integrate other formats like forums or discussions to improve their lessons. And this extra content is available at any moment from anywhere, which will offer you a more dynamic and tailor-made education.

#### **5. More cost-effective than traditional education.**

Unlike in-person education methods, online education tends to be more affordable. There's also often a wide range of payment options that let you pay in instalments or per class. This allows for better budget management. Many of you may also be subject to discounts or scholarships, so the price is rarely high. It can also save money from the commute and class materials, which are often available for free. Not only that, but there are also plenty of scholarships available for online studies these days. In other words, the monetary investment is less, but the results can be better than other options.

#### **Conclusion:**

Imagining & shaping digital education as a long-term learning strategy towards ensuring "New Age Learning" is critical to our journey which will help us leapfrog. We can leapfrog in education when we unleash the potential of a billion Indians - to learn and to help each other learn. Education is about learning, and learning should not just be restricted to schools. It should be learning by all, learning for all, learning with all. An approach towards integrating the use of technology with the education system will lead to development. Provisioning virtual labs, AR/VR content, games, and simulations on DIKSHA is aligned with the objectives of NEP to focus on 'learning by doing'.

The NEP 2020 lays stress on several areas of integration of ICT in school education as shown below. The PM e-Vidya initiative aims to achieve each of these outcomes.

- The teachers - 'our heroes' - are also being trained to leverage digital tools and resources. Ensuring multi-modal access is not limited to student learning initiatives only. The digital training courses for teachers are also made available online in a way to enable "anytime, anywhere" access.

- Overall, Indian education is being readied to adapt to a framework for enhancing learning within as well as outside the classroom. The foundation of this framework will be the Online/Digital Education Guidelines and Standards which will address the digital divide, enabling equitable learning.

- The present initiatives and the collective efforts are aimed at fulfilling our vision of making India a Global Knowledge Superpower and restore India's glory as a great centre of learning.

As per NEP 2020, Ensuring Equitable and Appropriate use of technology in all levels of education–

- To improve student learning outcomes,
- Teaching-learning and evaluation processes at scale.
- Enhance educational access to disadvantaged groups.
- Increase availability of data to enhance understanding of how children learn and
- Streamline educational planning, administration and management.
- Creating a Dedicated Unit for Building of World Class, Digital Infrastructure, Educational Digital Content and Capacity

- Promoting Education Technologies for Improving the Quality of Education
- Align major technology-related schemes with NEFT (ODB, ICT@Schools) etc.,
- Establishing NDEAR (Digital Architecture)

‘Equality of Opportunity’ is one of the basic principles of the Indian Constitution. Shifting to a system that benefits only a section of people and leaves behind the neediest ruins the very notion of this statement. Moreover, digital education is something where India is not successful yet. There is still a lot to do in terms of checking if students’ entitlements are not being compromised or in providing meaningful academic curriculum alternatives.

With this, there has been a growing need and demand for curriculum and courses focused on emerging technologies. Digital juggernaut is the future of the world. Harping on the digital transformation, skilling and up skilling and the evolved talent demand trends across organisation. The Covid-19 pandemic has accelerated the need for digital education and online learning. Universities, students and professionals are pivoting hard to both digital learning and online degrees.

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