DIGITAL EDUCATION IN INDIA EDUCATION (HOPE OR HYPE)

Rajeshwari Chauhan[*]
Dr. Mukesh Kumar Verma[**]

ABSTRACT

Indian government has introduced many initiatives like e-education, e-basta, Nandghar which will contribute in imparting education using science and technology including smart phones, mobile apps and internet services in far-flung areas where it may not be possible for teachers to be present in person. Education plays important role in overall development of individuals thereby contributing immensely to the overall development of a nation. Digital education is fun learning for all cadres and particularly effective for child learning as the innovative audio-video feature boosts the cognitive elements in a child's brain. The purpose of this to give overview of digital education, components of digital education, benefits of digital education in India, the future scope and possible challenges of an Indian society for moving towards digital education.

Keywords: Digital Education, Programmes, Benefits, Challenges.

_____

Introduction

Digital education means digital learning. It is a type of learning that is supported by digital technology or by instructional practice that makes effective use of digital technology. Digital learning occurs across all learning areas and domains. Digital education gives win-win opportunities for all, at one side School, colleges and other institution finds the rapid rise in enrolments and added revenue because of digital education, and other side students view this as a flexible and alternate option allowing them to study as per their convenient time and pace. Teachers and professors too find it convenient to prepare their teaching plans aided by digital technology. Teaching and learning becomes a smoother experience as it includes animations, gamification and audio-visual effects.

Digital India is a campaign launched by the Government of India in order to ensure the Government's services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or making the country digitally empowered in the field of technology.

Launched on 1 July 2015, by Indian Prime Minister Narendra Modi, it is both enabler and beneficiary of other key Government of India schemes, such as BhartNet, Make in India, Start-up India and Stand-up India, industrial corridors, Bharat mala, Sagarmala. The vision of Digital India programme is inclusive growth in areas of electronic service, products, manufacturing and job opportunities. It is centred on three key areas – digital infrastructure as a utility to every citizen, governance and service on demand, and digital empowerment of citizens.

Higher education in India is still a distant dream for many students due to high cost. But with an initiative like Digital India, the Human Resource Development Ministry is promoting online education online education access to the common masses in the country. Top institutes in the country both in the public and private sector are joining hands with HRD (Human Resource Development) Ministry to develop a comprehensive structure and policy for implementing a robust online education system. Educational institutes are also currently encouraged to showcase their best skills by developing suitable apps, platforms, education model for the massive open online course in harmony with the Digital India initiative.

_____

[*]   Research Scholar (Reg. no. 31319008), Shri JJT University, Jhunjhunu, Rajasthan, India.
[**]   Supervisor, Shri JJT University, Jhunjhunu, Rajasthan, India.

Digital Education is proving to be beneficial as the nation progresses forward. It can be taken by both full-time students and also by working professionals at their own time and pace. As more and more students will pursuing higher education online courses, the ecosystem for digital education will further develop and broaden. Growing demand in this area will eventually generate more revenue. In first decade the student's used to take education under the tree. Teacher's used to teach them under the tree. But education sector in India has long awaited an overhaul to meet the growing demand for a contemporary system that may be accessible to all. During the last decade the youth in our country have transformed themselves into technologically-driven.

Technology in education today because learners need digital skills, educational technology today has taken on a vibrant role in many classrooms. The focus is less on drilling concepts into student's minds and more on teaching them important computer literacy skills.

Programmes of Digital Education Field in India

The government of India aims to achieve following aims through Digital India Programme:

• **Diksha**

Government plans to use technology to upgrade the skills of teachers through online portal DIKSHA. The union ministry of Human Resource and Development (HRD) has launched Diksha Portal for providing digital platform to teacher to make their lifestyle more digital. Through this portal, all teachers across nation will be occupied with advanced digital technology Capitalising on digital influence for providing quality education is a considered to be welcome move by common masses. No doubt, technology has a very important role to play in education and the government has started aligning its resources accordingly. Digital education is crucial for the country's future if India has to become a trillion dollar economy.

• **eBasta**

This project has been created as part of the government's Digital India initiative to make school books accessible in digital form as e-books. The web-based application can be installed on tablets for navigating the framework.

• **ePathshala**

Developed by NCERT, ePathshala for showcasing and disseminating all educational e-resources including textbooks, audio, video, periodicals and a variety of other print and nn-print materials through website and mobile app. The platform intends to bridge the digital divide in the country- geographical, socio-cultural and linguistic.

Under ePathshala, students, teacher, educators and parents can access e-books through mobile phones, and tablets (as e-pub) and on web through laptops and desktops.

National Mission on Education Using ICT

The National Mission on education through Information and Communication Technology (NMEICT) has been envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time anywhere mode. It is landmark initiative of the Ministry of Human Resource Development to address all the education and learning related needs of students, teachers and lifelong learners.

National Scholarship Portal

NSP is a one-stop solution for end-to-end scholarship process right from the submission of student application, Verification, sanction and disbursal to end beneficiary for all the scholarships provided by the Government of India. This initiative aims at providing a Simplified, Mission- oriented, Accountable, Responsive & Transparent 'SMART' system for faster & effective disposal of Scholarship applications and delivery of funds directly into beneficiaries account without ant leakages.

National Knowledge Network

National Knowledge Network (NKN) project in India, aims to connect all universities, research institutions, libraries, laboratories, healthcare and agricultural institutions across the country to address multidisciplinary and collaborative paradigm for frontier research and innovation.

Government and Services

All the government services will be made available online where citizens will be ensured easy access to it. Transactions of banking services will be easy through electronic medium.

Training in Technology

The government has aimed to train around 1 crore students from small towns and villages for Information Technology sector by 2020. To set up the business Processing Organisation sectors in NE states is also part of this programme.

Swayam Prabha

In order to support and reach out to those who do not have much access to the internet, MHRD introduced SWAYAM PRABHA DTH channels. SWAYAM PRABHA is a group of 32 channels devoted to telecast of high-quality educational programmes. Four of these channels (27- Panini, 28-Sharda, 30-Gyanamrit and 32- Vagda) are already being used by NIOS and one channel (31- Kishore Manch) by NCERT to telecast school education related learning and teaching material. These channels can be accessed through DD, Dish TV and Jio TV app.

Manordarpan

Finance minister also launched Manodarpan, an initiative for psychological support and counselling of students, teachers and families for mental health and emotional well-being.

E-Shodhsindhu

E-ShodhSindhu jointly planned by the Ministry of Education and the Government of India is a digital library providing access to e-resources like journals, eBooks, factual, bibliographies, citations, etc. for higher education.

Benefits of Digital Education

- **Benefits to Academic Institution**

    Academic institution can easily manage their activities with the help of digital education.

    Some of the important benefits are:

    - Time and money of the Institution will be saved
    - It makes knowledge to transfer easily and equally from teacher to each and every student with the help of effective and advanced technology based teaching tools.
    - Easy communication between Institution and parents for student related academic activities.

- **Benefits to Students**

    As all the study contents will be taught in the classroom through multimedia slides, it creates interest and enthusiasm among the students. Learning will be fun for them. They are able to memorize many concepts through interactive audio- visual teaching contents. Some other benefits to them are:

    - They are able to prepare projects and presentation online.
    - They can give online exam and view their results.
    - They can easily collect teaching contents of missed lecture online.
    - They can access library online.

- **Benefits to Parents**

    In today's world, it is difficult for parents to visit the school or colleges because of their busy work schedule. Digital education helps the parents to view all the information of their ward from comfort of their home or office. Some of the other benefits are:

    - The web facility of digital education helps the parents to view their child's attendance record in syllabus, timetable, etc.
    - They can easily check the subject taught in school, homework given to their ward, any Future assignments and projects and guide the ward accordingly to participate and practice. Easily view internal and semester exam schedule and results.
    - Easily view internal and semester exam schedule and results.
    - They can easily pay the school fees and other activity charges.

- **Benefits to Teachers**

    Digital in education also creates interest among teachers. It helps them to make teaching interaction among students very effectively. Some other benefits are:

It helps the teacher to manage their class time and teaching content effectively.

- They can easily avail the school as well as class related information through web.
- They can check daily time-table, assignments, teaching history, events and holiday
- List, self as well as student attendance etc.
- It will help in allocation of class and subject to a teacher according to his/her interest and experience.

- **Benefits to Principals**

  Some of the important benefits to principle are: Easy to manage all the school/college activities

  - In case if the he is on leave, he will be able to access all the school information online and manage the school easily.
  - He can view teachers' teaching progress and students' performance.
  - It will help in allocation of class and subject to a teacher according to his/her interest   and experience.
  - He can assign tasks to other staff members and give remarks for their works.

Challenges of Digital Education

Digital Learning has become very popular with period of time. But it imposes certain challenges which need to be overcome. Someone rightly said**,** *"*Digital learning should be more about the human touch that just machines". The following are the challenges of digital learning along with the measures to overcome these challenges:

- **Resistance to Change**

Every improvement has two sides of coin, with one leading to advancement and development and other relates to certain challenges associated with the implementation of this advancement. Unfamiliarity of employees towards technology is one of the biggest challenges of Digital Learning, which the managers need to work with it. People commonly resist change, even if the changes are superior to what they had previously. They might not trust that a technology-based learning program will be as effective as interacting with an instructor. It's a fact that eLearning implementation can create enormous change within a company, so implementers can expect to face some resistance.

- **Resource and Internet Connectivity Related Challenges**

One of the main challenges for digital education in India is poor internet connectivity in rural areas and some part of urban areas. Majority of population across India has still no access to internet and a large population in rural areas is still illiterate in the field of digital technology. More Innovations required making the digital education more interactive and robust.

- **Poor Maintenance and Up Gradation of Digital Equipment**.

In rural areas maintenance and up gradation of digital equipment is one of the major challenges. This is largely due to budgetary constraints by government. The digital education Projects in rural schools are not self-sustainable. At initial stage various projects have been launched by government for the development of digital education, but later, they have not been taken due care for the maintenance of digital equipment which is affecting the digital education development in rural areas.

- **Lack of Internet Connection Penetration**

When we talk about digital education, the first thing that comes to our mind is the internet connection. As I have already talked about the electrification scenario in India, you might have already understood that the internet connection still has a long way to go.

Additionally, the number of villages with a broadband connection is also not satisfactory, however, in the last few years, the mobile network penetration has gained some pace, and the students might rely on cellular data for online education. But there are also additional challenges, which I will be discussing in the next point.

- **Internet Connection Plans and Speeds**

If you are relying on cellular data, you might have already observed the reduction in the internet speeds due to the long-term lockdown situation, when everybody is sitting home, and they are consuming a lot of bandwidth. The problem is not only limited to India, but the same thing is also happening around the world. However, if you are counting on a broadband connection the problem might not be that bad.

When it comes to online education, it is mostly about communicating with teachers directly through video calls or watching online video lectures, and both require high-speed with a stable internet connection. Even after the lockdown is lifted, the cellular internet speed is not going to skyrocket and thus, it will still be a hindrance that will always pull digital education back.

• **Lack of Devices for Digital Education**

It goes without saying, in order to attend classes online, and to watch video lectures, we all need a computer, laptop, tablet, or smart phone. Even though smart phones apparently sell like hotcakes, close to only around 30% of the population in India has access to smart phones. Hence, if we dream of digital education, there should be some way to bridge the gap and offer some form of smart device to the remaining population so that they can get the benefits of online education. Talking about India, there are several homes, where there is only one smart phone and no computers or laptops for the students to attend online classes. In those situations, the smart phone is mostly used by the earning member of the family, and if that person goes out for work, there is no smart device for the student to access the internet and eventually to get access the digital education.

Conclusion

Education sector in India has seen a series of rapid expansion in last couple of years which helped to transform the country into a knowledge haven. The study clearly points that development of education infrastructure is required for the development of digital education across the country. This will lead to considerable increase in infrastructure investment in the education sector. Democratic governance, English speaking tech-educated talent and a strong legal and intellectual property protection framework are required for the development of digital education in Indian society.

References

~ Digital India plan could boost GDP up to $1 trillion by 2025: McKinsey, December 2014. See: http://economictimes. indiatimes.com/industry/telecom/digital-India-plan-could boost-gdp-up-to-1-trillion-by-2025-mckinsey/articleshow/45536177.cms

~ Jinal Jani and Girish Tere (2015). Digital India: A need of Hours. International Journal of Advanced Research in computer Science and Software engineering.P.8SSN;2277128X

~ Himakshi Go swami (2016). Opportunities and Challenges of Digital India Programme. International Education & Research Journal. E-ISSN NO. 2454-9916 Volume: 11 Nov 2016.

~ Digital India, Government of India press Release, August 2014. See: http://pib.nic.in/PrintRealese.aspx? Relid=108926.

❖◆❖