DIGITAL EDUCATION IN INDIA

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Abstract -India is estimated to be the economic superpower of the future. However, many people in India are still not affected by this progress. The main reason for this is the lack of digital literacy in rural India. Technology is promptly changing the way we live and team up. Education is lagging in terms of technology adoption. Only education is the medium that can change the world in positive way.Education technology can help to exclude current barriers of providing quality education to all across the world. Even today in India, approximately 40% population is living below poverty line, illiteracy rate is more than 25-30% and digital literacy is almost non-existent among more than 90% of population.The use of internet, tablets, smartphones, personal computers, laptops and social media platforms and applications like Facebook and others have a far more enriching impact on proliferation and spread of digital education than one can imagine. The present paper seeks to evaluate the opportunities and accessibility of digital education in India and the potential bottlenecks involved with measures to overcome them.

Key Words:digital education, digital India, digital education in India, online education in India, Indian education

1. INTRODUCTION

Technology is an important tool which changing the way students learn and the way teachers teach. As education technology becomes more classy, more accessible, and more attractive, schools and parents are better furnished to adapt to the different ways students look to learn. Learning can now occur beyond the time and physical limits of a normal school day.

Due to steady economic growth and globalization, education in India is no longer just a teacher talking to a bunch of students in the classroom. With over 370 million Internet users and hundreds of local as well as global businesses willing to invest in the future of education.In fact, the e-learning market in the country is estimated to be over $ 3 billion. India is now the third largest online education market in the world. This enables people to better take advantage of the resources available online.According to the survey, 5% of children never start school, 58% don't complete primary schools, 90% don't complete secondary school and only 10% go on to college. In fact, online education aids people acquire access to a online learning experience when traditional higher education is simply not possible due to financial or personal limitations. Many students suffer from physical or mental infirmities that make learning in a classroom impossible. For these students, online courses and degree programs can offer an incredible chance to continue their education and build careers for themselves. These days, employers want more than the basic skills set in their employees; they want long-term relationships with the organization. Often, evaluation and promotion are provided on a resale basis.

2. DIGITAL EDUCATION VS CLASS ROOM EDUCATION

The digital education system is where we made right use of technology through learning many different things at the identical time whereas the traditional education system is learning between the set of class and with the teacher. According to me, both the system has become mixture as we learn things digitally with the teacher. Independently both have certain pros and cons that in traditional education confidence is more than digital education, in digital education we can learn wherever and whenever we want but in traditional education, timing is fixed which sometimes is not appropriate. So, I meditate without doubt digital education has taken over traditional education but in a positive way.

The nationwide COVID-19(disease in the year 2020) lockdown has forced K-12 schools and universities to close and send their students home which, in turn, has impacted over 91% of the world's student population. The closure has placed unprecedented challenges on governments, institutions, teachers, parents and care givers around the world.

Many countries are continuing to handle this disruption by deploying different modes of learning through a mix of technologies. In almost all countries, teachers and school administrators are encouraged to continue the communication with learners by delivering virtual live lessons or Massive Open Online Course (MOOC)-styled ones.

Online education, a result of the digital world has brought a lot to the learning table at all levels of education, beginning from preschool up to higher level institutions. The move to remote learning has been enabled by several online tech stack such as Google Classroom, Blackboard, Zoom and Microsoft Teams, all of which play an important role in this transformation. With the development of ICT in education, online video-based micro-courses, e-books, simulations, models, graphics, animations, quizzes, games, and e-notes are making learning more accessible, engaging, and contextualized.

3. COMPONENT OF DIGITAL EDUCATION

Primarily Digital Education has 3 components:

- The content
- The technology platforms
- The delivery infrastructure

To understand in better way let's take an example of BYJU's, one of premier organisation offering digital education for school sections, college sections and various competitive exams. They claim they will make teaching a fun experience for your child. They are offering good content for each section covering all the academic details. All the portions are loaded in digital tablet by Samsung or Lenovo. They are having good delivery infrastructures, once you have placed ordered as per your requirement, the product will be delivered at your place and thereafter they will give online demo to use the same.

4. BENEFIT OF DIGITAL EDUCATION

I. 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.
- They can easily plan to conduct online exam and publish the exam results quickly.
- 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.
- It helps in creating interest among student which will help them in learning many concepts through interactive- audio-visual teaching contents.
- Advantages over other schools and colleges which cannot provide such integrated feature-based learning and management system.
- Easy communication between Institution and parents for student related academic activities.

II. 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 can easily view their daily time-table, class assignments, any events planned in school etc. from home.
- 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.

III. 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, progress 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.
- They can easily pay the school fees and other activity charges.
- They can get information on various school events, notices, holidays and can track the presence of ward in the classroom /outside the class.

IV. 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 helps in explaining the difficult content easily and in effectively.

V. 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.

5. CHALLENGES OF DIGITAL EDUCATION

Some of the major challenges for digital education in India are:

i. 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 to make the digital education more interactive and robust.

ii. Shortage of trained teachers.

A major obstacle in the use of digital education in rural area is the lack of knowledge and skills. There is a shortage of teachers, formally trained on digital technology. In some of the academic institution in rural areas, school teacher and college professors are not interested in using digital tools for conducting classes. They feels that a lot of information is explained to the students at one go through the digital medium and they prefer traditional teaching methods of chalk and blackboard. In rural areas, primary teachers and senior teachers are reluctant to get trained and adopt digital technologies for digital education in school because they are in view that these disruptive technologies are out to replace them permanently.

iii. Language and content related Challenge.

Languages is one of the main barriers for the development of digital education in India, there are several different languages in different state have been spoken all across country, pushing all the digital content in all these regional languages some time becomes difficult for the agencies.

iv. Poor maintenance and upgradation of digital equipment.

In rural areas maintenance and upgradation of digital equipment is one of the major challenge. 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.

v. Insufficient funds

Digital education involves effective and efficient usage of appropriate and latest hardware and software technology available in the market. In developing countries like India, digital technology implementation into education systems is a difficult task as it requires huge funds and infrastructure. Through Digital India programme, the government has promised availability of funds for technology implementation but lack or insufficiency of finances leads to redundant and obsolete infrastructure and equipment's in rural schools.

6. OBJECTIVE

The objective of the research paper is to study:
a) Component of Digital Education.
b) Benefit of Digital Education to different stakeholder.
c) Scope of Digital Education in India.
d) Challenges of Digital Education

7. CONCLUSIONS

Only 36% of the Indian population has access to the internet, according to the India Internet 2019 report by IAMAI[1] and Nielsen. Approximately two-third of municipal school students in rural areas are unable to access teaching material as they don't have internet access. The study clearly points that development of education infrastructure is required for the development of digital education across the country.

Mere discussion and policy on paper will not work now; it's time to, **"Arise, Awake and Stop not till the goal is achieved."(Swami Vivekanand).**

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