

DIGITAL EDUCATION IS A MYTH OR REALITY RESEARCH

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Introduction

Digital education is the innovative use of digital tools and Technologies during teaching and learning, and is often referred to as Technology Enhanced Learning (TEL) or E-learning. Exploring the use of digital Technologies gives educators the opportunity to design engaging learning opportunity in the courses they teach, and these can take the form of blended or fully online courses and programs.

Blended learning

Blended approaches used multiple methods to deliver learning by combining to face to face interactions with online activities.

An example of blended learning is the flipped classroom where online activities are completed outside the classroom providing an opportunity for more in-depth discussion during the face to face time spent in class.

Online Learning

Online Learning offers many benefits for students including the chance to study flexibly and from a location that suits.

Why digital education is important?

Digital learning increases access to education and knowledge why empowering students with a mindset and capabilities that sets them up for their success in their present and future. Digital education is largely an innovation of the last few decades, although it already existed in various forms slightly earlier. Shortly the educational system environments are anticipated as mitigation to unforeseen natural and artificial pandemics such as covid-19 in 2020 by the significant changes associated with the digitalization of some portion of the system. This article aims to provide valuable perspectives of ICT and distance education into its future benefits, risks and challenges of embracing the latest technologies in the digital era and vast online open courses. We have checked a profound change in the way we interact and generate within the academics with the advent of internet Technologies. Globally, the digital revolution favored open access to information. Classrooms today have a lot of ICT resources nearly all the teachers have made great strides to incorporate digital technology to increase access to information and collaborative activities for the learners.

Digital education is largely a result of the past few years, though it has already existed earlier in various forms. However the modern equipment and means of transmitting information are important for its growth. Thus without the rapid development of computers and the internet, this form of education would not be feasible. It can be inferred that they were primary concerning digital education forced its advent because the proliferation of computers and broad band. Internet gave a very strong impetus to use them in educational activities. Consequently, interactive classes, modern e learning courses, educational games, electronic assessments, educational resource portals, digital School registers and learning process management systems have entered into daily existence today. This article aims to illustrate the context of digital education, the current state of its implementation, the anticipated outcomes and concerns in this regard.

Three related items in education are made possible by Digital technologies i.e. Teaching without physical contact, immersive practice and contact on -site. With the advent of smart-phones enable students to use these devices as an alternative medium of contact with teachers and between students. The provision of digital educational facilities is known as e-learning. This involves material for studying, preparation and knowledge transfer etc. The successful implementation of e-learning is achieved with the aid of Technology. ICT tools will continuously play an essential part in motivating institutions of higher education. To this end, educational practitioners, faculty, staff and administrators must counter academic integrity, human rights an intellectual property concerns that have become a major concern in the educational environment.

It is unquestionable that as we experience a rapid Technology transition and reach a New Millennium, new technologies have given instruments for constructing education. The ICT emerged

now-a-days plays a major role in globalization where National boundaries are blurred by instant communication and even sharing of information.

The internet is now used in lecture halls, tutorials, laboratories and in the preparation of assignments as a strong complement to the conventional forms students study and learn.

Students need to be able to collect and use of online information in the world that is increasingly adopting digital media as the principal means of communication.

Empowering young people to become full participants in today's digital public space, equipping with the codes and tools of their technology rich society and enabling them to use online learning opportunities- all while exploring the use of digital technology to improve existing educational processes such as student assessment.

The remarkable growth of advanced communication technology has driven universities, businesses and educational institutions experimenting with alternatives to conventional teaching methods.

As a country, we are going through an incredible phase of technological development and it is impacting every sector not just in business but in education as well. For a long time, we have relied on traditional teaching methods in a four walled class room. The extent, to which education could be disseminated in this way, depends upon the teachers' ability to help students visualize difficult concepts with the right tools. However with the beginning of the fourth industrial revolution, we have begun technology towards a world that relies heavily on digital technology to make things easier. Several online learning platforms have mushrooming up in the past few years to make learning easier, simple and convenient. As of now, we have more than 560 million internet users in the country, 100 number is going exponentially. It means that the online world has become easily accessible have a major chunk of our population and we need to make the most of this change.

The e- learning market that stood at 247 million US dollars in 2016 is now expected to reach INR 91.41 billion by the end of 2021, expanding at a CAGR of 17.60% during 2021-2026. Even though the e-Learning market was already evolving rapidly, the intervention of the covid-19 pandemic has added fuel to the fire. Due to which schools, colleges and educational institutions shutdown to prevent any outbreak, online learning has emerged as the primary teaching platform.

Several initiatives have transitioned to a blended learning model and are planning on continuing with even after the pandemic subsides. Know that people have realized the benefits of online education; they will most likely continue with it in some way or form in the future as well.

Advantages of e- learning

1. Helps overcome geographical limitations.

With e- learning, the dissemination of education is no longer limited to geographical location. All you need is a laptop, a smart-phone or a tablet with an internet connection you can access the best educational material on any subject. The Flexible nature of online education has also opened the doors for working professionals to learn from their home or office, improve their skills to advance their career.

2. It is affordable.

In a country like ours, financial problems are always an obstacle in the path of education. Many students who want to learn and study cannot do so because they cannot afford the high fees of the top institutions luckily, the future seems more promising. They can pursue online courses from the most prestigious Universities at highly affordable rates.

3. It is a boon for teachers too.

E-learning does not just benefit the students; it benefits the teachers as well.

4. Allows you can learn at your own pace:-

Classroom environment is such that it requires everyone to learn in the same pace. With E- learning, however every student can learn at his/her own pace.

5. Technology as a Savior.

Flexibility: Online education enables both the teacher and students to set their own learning pace plus provides flexibility of setting a schedule that fits everyone's agenda.

6. More cost-effective than conventional learning:-

With the Online mode of learning, the money spent on study material along with commute charges is considerable less.

Challenges:

The biggest challenge for the e-Learning in India is the lack of technological penetration in rural areas. Given that the most of our population (65.53%) resides in rural areas, this is a serious issue that needs to be tackled.

Although digital education has important strengths and provides unique access to quality education, the use of this platform has limitation that can pose potential challenge to the success of any online courses.

1. Computer literacy:-

To work effectively in an online environment, both students and intermediaries must possess a basic level of computer literacy.

2. Lack of teacher -student physical education:-

How much teacher contact learners get on a physical campus is easy to under estimate. Then right before and after training, one hour, and chance Encounters in the corridor, there is an opportunity for discussion ----- all possibilities that are not accessible for digital education.

3. Technological difficulties:-

We prefer to take it for granted that a laptop or desktop computer of the latest model is available to everyone. Not every student has had the same access to technology, however, even for a generation of digital natives.

4. Poor-Time management.

5. Digital education is not suitable for practical courses:-

For Practical activities in tertiary education, digital and E-learning are incompatible. E- Learning offers realistic session- related knowledge and preparation, but instead of mastering preparing, the learner does measure their output or real time experience.

6. Lack of Technology access:-

Not everyone who can afford to go to school can afford to have phones, computers or even quality internet connectivity for attending classes online. Due to this, the mental stress that students have to undergo is very high.

7. 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 whom cannot access the technology.

8. Lack of a Healthy learning environment:-

Education is not about classes but interactions, broadening of ideas, and free flowing open discussions. There is substantial learning that is lost when education goes online.

9. Health -Eye issues:-

Younger students especially in classes 1 to 3 were most likely to suffer from Eye- health issues due to starring at the computer or the mobile for attending periods.

Digital education initiatives:

India is well progressing towards digital education backed by rising adoption half digitization by Universities and colleges, increasing internet penetration and soaring demand from students. As per the Redseer consulting, online education market (higher education and lifelong learning market) in India is forecast to US dollar 5 billion by 2025, driven by the government's focus on designing online education programmes, strengthening digital infrastructure across the country and catering to the rising demand up skilling among students.

According to IAMAI-KANTAR Cube report, active internet users in India is estimated to reach 900 million by 2025 up 45% over 622 million active internet users in 2020.

The Indian government also launched the 'Digital India' initiative in July 2015 to strengthen online infrastructure and expand internet accessibility among citizens.

Further during the pandemic the Indian government has taken several initiatives (e.g. PM e VIDYA programme, DIKSHA etc.) to make it on par with the global online education.

National digital educational architecture (NDEAR)

To strengthen digital infrastructure and support activities related to education planning.

PM e VIDYA programme.

The government introduced the PM e-VIDYA programme in May 2020 to make e- learning more accessible for Indian students and teachers to promote and strengthen digital education in India. The programme aims to converge all activities related to online/ digital education is expected to benefit

25Crore school students.PM e-VIDYA will be expanded from 12 to 200 TV channels from 2022-23FY onwards.

The programme will also encompass designing unique e-content for hearing and visually impaired students and offering radio/Podcasts QR coded digital textbooks to school students (classes 1 to 12) on the Diksha portal.

Under this, top 100 Universities were permitted to begin online courses, provide better learning prospects to 3.7 crore higher education students and enhance E- learning by relaxing regulatory framework for distance/ online education.

DIKSHA:-

In September 2017 the government introduced DIKSHA (digital infrastructure for knowledge sharing), national portal for school education.

SWAYAM

In 2017 the government launched study webs of active learning for young aspiring Minds (SWAYAM) to offer an integrated platform for online courses at affordable costs to all citizens, especially the underprivileged sections in the country.

The portal hosts massive open online courses (MOOCs) to offer quality education on various subjects for students (from class 9 - 12 to undergraduates and postgraduates)

SWAYAM PRABHA

In 2017 Swayam Prabha a group of 34 DTH (direct to Home) channels dedicated to broadcasting educational programs 24 ×7 was introduced. The channels broadcast new content for a minimum of four hours every day and this is repeated five times in the same day for students to select a convenient slot.

e-pathshala portal

In 2015 the government launched the e-pathaShala portal to build a resource store for educational videos, audios and Flip Books etc.

NISHTHA

In financial year 2021-22 the national initiative for school heads and teachers' holistic advancement (NISHTHA)- phase -2 was launched secondary level to tailor modules per UN line education. As per the union budget 2021-22 5.6 million teachers will be trained under this programme.

OLabs

To offer students lab learning experience via Internet the government introduced OLabs in November 2014 for those who do not have access to physical Labs.

Virtual Labs

The Government of India introduced a pilot virtual lab in 2009 and the main one in 2016 to enable UG and PG students (pursuing science and engineering) remotely access the labs and enhance their study experience.

The virtual labs offer students a Learning Management System and various study aids such as video lectures, web resources, self evaluation and animated demonstrations.

Along with these, other digital initiatives taken by government include Shiksha-Vani for widespread use of radio, the CBSE podcast, sign language content on the national Institute of Open Schooling(NIOS) website/ YouTube and digital accessible information system(DAISY) for accessing special e-content for hearing and visually impaired learners and free open- source software for education(FOSSEE).

For strengthening digital education in India, the government eased regulations on online education and finally allowed universities and colleges to extend less than 20% degree online courses from 2020 onwards. Further, increasing digital education in India is also helping the government to the government to improve accessibility in rural areas and impart quality education to students in small towns and villages. Further, this also provides an opportunity to private players to venture in the digital education sector. For example in January 2021 as per collaborated with 'Teach For India' and 'iTeach schools' to assist e-learning programs for rural kids.

Rising adoption of digital education in India is also attracting global key players to offer online courses to students and extend opportunities to learn new skills. For example in January 2021 Amazon India launched 'Amazon Academy' an online platform enabling engineering aspirants to prepare for competitive exams such as the JEE.

National program and Technology enhanced learning (NPTEL).

It is a project initiated by 7 IITs along with Indian Institute of Science Bangalore online education in 2003.

PRAGYATA

School can hold live online classes to 1-12 classes.

The future of digital education in India:--

The Government of India will focus getting students industry ready by evaluating their competencies and helping them get aligned with industry- based skills. To achieve this government is promoting Indian Institutes and colleges to shift from traditional operational to digital modes. In line with this several educational establishments such as IIMs and ISBs transfer there examination procedures online.

In July 2021 the Government of India stated that space Technology is being used for Digital education in India. At present under the Tele- education programme 19 states and Andaman Nicobar Islands have been leveraging satellite communication for beaming 51 educational channels.

Conclusion

India is moving towards a global knowledge superpower in which educational technology, digital initiatives and virtual classrooms play prominent role especially for the people of rural and remote India. Hence, Digital education and virtual learning need to be essential prerequisites for the most of the rural development programmes.

Education is a national building process and digital education is the progressive education for building a healthy rural India.

E-Learning is not just a change in technology; it is a part of redefinition of how we as a human species of transmit knowledge skills and values and values two younger generations of workers and students. Thus E- learning should be enhanced and encouraged in a safe and sustainable manner.

India's school going population accounts for 35% of the total population. These children will be the future of the nation and will have a considerable role to play in helping India to become a USD 10 trillion economy. India's efforts in diverting sizeable investments to make our youth more employable and entrepreneur are laudable – vocational learning building, 'startup India'. Yet more than 70% of the children in rural India don't have access to the internet.

'Equality of opportunity' is one of the basic principles of the Indian Constitution. 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 meaningful academic curriculum alternatives.

Digital revolution has proven to be beneficial to all sectors of the economy, including education. Earlier EdTech platforms were prominent in urban cities, but now they are gaining traction in tier2 and 3 cities as well.

National education policy 2020 has strong emphasized on digital technology to access quality education. In this backdrop prime Minister of India announced establishment of Digital University ,it can solve issues related to limited seats in our Universities. It will operate in a hub-and-spoke model, incorporating the best technology platforms, digital content creators and top ranked higher educational institutions. However, the infusion of digital technology will redefine the role of teachers from knowledge content disseminators to content creators because even in the physical environment the inflow of digital technology is inevitable. The central Digital University with a hub-and- spoke arrangement could well serve the need for remote learning in the digital space. If this is well planned and leveraged this could be a boon for those who can't have access to formal University education system and change the higher education landscape in India.

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