Impact of Digitalization in Education Sector

UMAKANT SINGH¹
(Assistant Professor)
Department of Computer Application
MPGI, Kanpur, Uttar Pradesh, India

MENCY RAJPOOT ³
(BCA STUDENT)
MPGI, Kanpur, Uttar Pradesh, India

MAYANK SHUKLA²
(Assistant Professor)
Department of Computer Application
MPGI, Kanpur, Uttar Pradesh, India

KULSUM SIDDIQUE⁴
(BCA STUDENT)
MPGI, Kanpur, Uttar Pradesh, India

Abstract

The Covid-19 pandemic that has affected the world’s economies has also muffled the education industry. End of March, 2020 recorded the spread of pandemic to over 185 countries and resulted in closure of over 95% of all schools, colleges and universities. The spread of the epidemic was so speedy and quick that there were hardly any plans for transition to online teaching or learning from offline classes and no one could anticipate the associated possible risks and opportunities that a sudden change could bring in the sector. The effect has been radical, as educators expect technological solutions to support remote education and learning. Digital transformation in education sector is, however, not limited to post Covid-19 online education and learning. Although some educational institutions have used technology solutions for the past years, the importance of digital transformation in education environment has now been realized in most schools, colleges and universities during the pandemic. Indian education system is still
not mature at both the urban and rural areas. Under these circumstances government imposed nation-wide lockdown on March 25th, 2020, has made severe impact on the education system. Since the Indian education system is dominated by classroom study, the present scenario has made the functioning of the educational institutions go very difficult.

This paper measure the digital transformation in the education sector in India and highlighting some key areas of transformation in education sector, and also tries to give a roadmap to future e-learning system.

**Keywords:** Digitalization, Online Learning, Modern Education, Traditional Education

**Introduction**

Digitalization is the integration of digital technologies into everyday life by the digitalization of everything that can be digitized. In other words, digitalization is the process of converting information into a digital format. The actual meaning of digitalization gives a clear idea of development and technology dependent world. Digital technologies have brought changes to the nature of education and scope of education.

Digital transformation in education plays a vital role in providing high-quality education and equal opportunities to learners all over the world. The impact of digital transformation in education is that it helps to improve the learning experience for the students and teachers, as well as the other people involved in the process.

The process of digitalization in education offers a lot of benefits for students, such as faster access to tests and grades through online system. With the help of internet, students can access vast amounts of information from anywhere in the world. They can learn about any topic they are interested in by simply searching for it online. This has opened up new opportunities for self-directed learning and has made education more democratic, as anyone with an internet connection can access educational resources. With the help of digitalization in education sector you can easily measure via a digital platform.
Objective of digitalization in education sector

1. To analyze the effect on Indian education system during the post-covid.
2. To find out future perspective of digital education in India.
3. To improve the quality of education and enhance the learning process through digitalization.

Research Methodology

Sources of Data Collection: The data for the study has been collected through relevant research journals, magazines and present available literature on websites. Various government reports have also been considered.

Review Of Literature

Korableva (2019) highlighted on the benefit of online courses over the traditional class room based teaching. In extend of the study, more insight was on the latest two online platforms, MOOC and Course era, to understand which more user convenience is as well as give the best solution in terms of knowledge.

R.Raja (2018) did a research on the importance of technology in education system with reference to schools in Chennai and found that with the onset of latest technology like ICT, and other digital tools are very helpful to impart knowledge to our students and process of teaching and learning can be more enjoyable.

Dr. Radhika Kapur (2018) in her study focussed on the problem faced in Indian education system like importance of quality education, challenges in the traditional mode of Education system, lack of Student engagement etc. In extend of the study author found education quality, trained teachers, the curriculum & instructional methods are not well developed and these are also contributing as major issues in Indian education system.
Reeves, Jennifer L., Glenda A. Gunter (2017) in their research focused on influencing student-teacher collaborative efforts and increasing engagement while learning through digital tools, completing assignment, worksheets online as well as taking the help of user-friendly professional educational apps to enrich their knowledge.

Chahal (2015) found in her study that due to many problems like poor teaching methods are, less number of professional and trained teachers, the curriculum, the old teaching-learning methods are not well organized, no proper and appropriate communication between the teachers and students regarding the lectures, shortage of modern and innovative techniques and financial problems, the teaching in our educational institutions is not better quality due to above mentioned reasons and some strong measures need to get implemented to make our education system more effective.

Effect of digitalization in education sector

Digitalization in education sector also has both positive and negative effect.

Positive effects of digitalization in education sector are:-

1. Online courses- They are used to learn a new language or get trained in some specific course, or even to learn through distance learning.

2. Online examinations- Online examination process is convenient for both teachers and students.

3. Digital textbooks- Digital textbooks provide an interactive interface in which the students have access to multimedia content such as videos, interactive presentations, and hyperlinks.

4. Learning through animations- This is typically used for educating children between two five years old. Learning through pictures, diagrams, through colors is more effective.

Negative effects of digitalization in education sector are:-

1. Data security-Digital technology has enabled people to store huge amounts of data. It is easy to store all of this information. But there also is a possibility of the information being breached, with the increase in cyber threats.
2. Terrorism and crime-There are many people on the internet, who with the use of the dark web can do just anything.

3. The concern for privacy- Everyone now has smartphones and it is really easy for anyone to take pictures and videos of literally anything, anywhere, and more so, post it on social media.

4. Manipulation of digital data- The data available online has now become easy to edit and manipulate. With this, the people can very easily spread fake news, and because most of the people are seen online, they seem to believe whatever the internet feeds them, the news spreads like wildfire which most of the time isn’t even true.

Future Perspective of Digital Education in India

In this digital era, a lot of students are slowly but steadily shifting towards online digital courses in almost every field including business, arts, engineering as well as programming languages and technical tools. In each and every field, there are numerous courses available digitally across the world and the learners are eagerly filling up the seats. Digital learning is an advanced technological medium providing learners with a great deal of flexibility, allowing them to study at any time from any place at their own convenient speed without worrying about timetables and schedules. Digital education is providing both teachers and students new opportunities to teach, learn, and grow thereby improving the overall learning process.

Following emerging trends of digital education

- Social media
- Digitalized classroom/Flipped Class rooms
- Interactive Learning Resources
- Video based learning
- Massive open online course (MOOCS) & Other distant learning programs
- Interactive Software – K12 sector Game based learning
How improve the quality of education and enhance the learning process through digitalization

Educational technology is the more deeply profitable for teaching and learning. Digital learning can enhance the student performance in education. Digitalization can also improve the education governance and education administration. In digital learning, smart classroom can increase the student interaction and engagement. Digitalization is the online platform where the student can enhance their learning skills. Digital technology provides the study material to the student.

Advantages of digitalization in education

Some advantages of digitalization in education sector are:

- Easy process in delivering the material to the students.
- Easy access to students: students can easily access different resources without any trouble.
- Gives students and teachers the premise to experiment and innovate.
- Connect students and teacher, parents across different geographies
- With the innumerable software available, learning and research is fun.

Disadvantages of digitalization in education

Some disadvantages of digitalization in education sector are:

- Technology is distractive, the attention span of a child and even an adult gets diminished with digital tools.
- Personal interaction between teachers and students or peer discussions reduces.
- Not affordable for all
- Digital tools increase the scope for malpractices during examinations.
- The credibility of information available online is questionable at times.
- Inappropriate content, video games, especially violence can impact the mind and health of young adults.

**Conclusion**

Nowadays, digital education gives more skills and job opportunities to the students. Digital education enhances our skills and performance in education sector. In the past there is no digital technology to enhance our performance but teaching is more effective than the online mode teaching because of face to face interactions, lively talking, active participation in activities. Digital education has a very positive impact on education and at the same time may also pose negative effects. In present time, teacher and students should take advantage of this in the good light and eliminate the drawbacks which are pulling back many of students as well as schools from achieving excellence.

**Reference**

5. https://www.coherentmarketinsights.com