The positive and negative impact of new technology on accelerated learning during covid-19 pandemic

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Abstract

Education has always enjoyed a high status in Indian society focuses solely on the abilities, moral values and social practices of students and pass them on to the next generation. The current scenario of education has completely changed and online education has now gained a lot of recognition at the academic level. With the advent of more advanced digital technologies and increasing interest in the internet, overnight, homes were converted into classrooms, and schools were transported into a virtual realm. This pandemic provides an opportunity for teachers and students to explore online teaching. This covid-19 pandemic has laid down an overall impact on all sections of the society- learners, parents, teachers, leaders etc. Life is full of challenges so is the case with education system. The challenge for teachers after introducing emergency remote learning to ensure the continuity of their schooling was how to create a rich learning environment while making an investment in technology. The difficulties that all students encounter as they traverse this new world are enormous and remarkable. Based on secondary data, this study strives to understand the concept of digital education, highlight the positive and negative impacts of digital education while implementing it in the teaching and learning process.

The conclusion drawn from the study suggests that development in digital learning helps a lot in making our education system firm in COVID-19 pandemic but complete implementation and advancements needed to face the situation in the long run.

Keywords: online teaching, covid-19 pandemic, technology, digital education

Introduction

Today, we live in a digital-based world in which knowledge is a great source of power, economy, and strength for an individual, as well as a national asset. As a result, we require new technologies to gain access to and make good use of this rapidly expanding knowledge. Furthermore, mere knowledge acquisition is insufficient; we have complete access to and mastery over the knowledge acquisition process. It can only happen with the help of information and communication technological science. The epidemic has disrupted the normal lives of people around the world, the Covid-19 pandemic has also affected academic systems worldwide, resulting in the total closures of schools, universities and colleges. Most governments set to quickly shut educational establishments in an effort to reduce the spread of Covid-19. It has severely affected the practice of daily teaching-learning, and brought many challenges for students as well as teachers. So, digital education is a good choice to face these challenges at the academic level.

Digital education, also known as Technology Enhanced Learning (TEL) or e-learning, is the creative use of digital tools and technologies in teaching and learning. Online education enables the teacher and the student to set their own learning pace and face the digital challenges ahead.

Students

During this Covid-19 lockdown, students may be provided with appropriate opportunity and training for acquiring and utilising knowledge for self-improvement. ICT may assist kids in satisfying their desires for inquiry, ingenuity, construction, and so on. They become accustomed with key sources of information, strategies and means of extracting necessary information, information processing procedures, and so on.
The training they acquired in good decision-making and problem-solving skills may enable them to make the essential behavioural changes. It also enables individuals to receive self-paced auto-instruction in academic and co-curricular areas of education.

- **Teachers**

ICT provides adequate assistance to teachers in their teaching tasks. Their familiarity with important information sources such as books, journals, and other reading materials. The availability of audio-visual materials and equipment, as well as electronics and telecommunication media, enables them to obtain the essential teaching materials and procedures. They may also breathe a sigh of relief if they notice their kids using ICT tools for self-learning. They may benefit greatly from programmed learning material, self-learning modules, teaching devices, and computers in this regard. If ICT services are used effectively, they make it easier to achieve the teaching-learning objectives.

**Need and Importance of The Study**

Over the last few years, digital technology in India has evolved, changing the way students teach concepts in schools. As schools increasingly use digital solutions to keep up, traditional dialogue and chalk teaching methods have paved the way for more interactive teaching methods. As the current generation of students are familiar with laptops, iPads and smartphones, these innovative teaching methods can ensure more student participation. The spread of digital technology is completely changing the way education is provided. With the emergence of new technology learning tools such as smart boards, tablets, and laptops, the way schools provide education has changed. It is also a powerful system that can provide everyone with a world-class learning experience. Educational technology companies are constantly striving to find innovative solutions to improve access to education for people who are currently looking for suitable educational institutions. The best thing about digital education is that you can only create resources once and use them multiple times for future generations. This saves a lot of resources and energy. With technological advances in education around the world, it is imperative that the Indian education system become more dynamic, adapting and integrating technologies in order to generate more effective learning media. Because the bulk of India's population lives in rural and semi-urban areas, this technological infusion must begin at the grassroots level, because only then will we be able to work to address problems such as high dropout rates, illiteracy, and substandard education in our country. Thus, the Covid-19 pandemic poses major challenges for the education system.

**Objectives**

This research paper focuses on the following objectives:

1. To allow the teacher and the student to have a pace and convenience of their own learning.
2. To highlight the innovative teaching-learning strategies.
3. This study also intends to highlight the positive and negative impacts of digital education during Covid-19 lockdown and to put forth the suggestions with respect to digital education.

**Methodology**

The study is primarily based upon the secondary data. On the impact of Covid-19 on education system, a large resource of written material was used, which included books, articles, academic journals, references as well as the genuine websites.

**Innovative Teaching- Learning Strategies**

Education is the most important tool that man has developed for his own progress. It is therefore not surprising that all dynamic and progressive nations are demanding an educational system that takes the lead in shaping and managing a future that guarantees a better life for all. “The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverers, who can be critical and verify, and not accept, everything they are offered.” (Jean Piaget, 1967). Today The educational objective of India is to establish an appreciative society, an enlightened existence including all of its members, and to utilise all intellectual and natural resources for this purpose. The digital education platform is the most essential and powerful weapon for quick development, progress in technology and the establishment of a social order based on libertarian ideals, socio-economic fairness and equal opportunity for all in every area. Different e-learning settings can be shown to adopt any of the following modes and styles in order to fulfil this criterion, as under:

- **Support learning**

During this Covid-19 pandemic, the teaching-learning activities organised within the class can simply perform a supportive function. This allows a teacher to use his teaching to improve his/her education and a learner to improve his/her classroom activities. For example, they can use multimedia, the Internet and web services to educate and learn.

- **Blended learning**

In this way, efforts are made to apply a blend of traditional and ICT enhanced e-learning approaches. The programmes and activities were planned and carried out in such a way that both the traditional teaching and e-learning techniques were glad to be combined. Thus, both traditional and e-learning approaches can benefit. It is a blend of online and offline modes in a simplified context, which we can state. The objective of mixed learning is to give the most efficient and effective learning experience.

- **Complete e-learning**

The traditional learning in this style of learning is replaced entirely by virtual learning in the classroom. The traditional establishment of schools does not have classrooms, schools, or the learning environment. But as of now, the learner is free to take on their own learning activities by means of well-designed e-learning courses such as SWAYAM, MOOCS etc. Most of the learning activities are fully online but can also be accessible via many current digital platforms with well-stored information and learning packages as well as in the form of recorded CD-ROM, DVD, etc. Such type of e-learning activities may be found to adopt the following two distinctive communication styles as highlighted below:
Asynchronous communication: In this form, the students receive knowledge or learning experiences using e-mail, discussion forum, web pages, web logs, blogs, wikis, etc. This means that teachers and students do not interact at the same time. Messages/reading materials, instead, are posted or delivered by email to a forum or website. A reply will be sent at an undefined period later. Additional posts or communications with necessary delays will answer all follow-up queries. It does not give any chance for a direct dialogue between teachers and students or for direct online participation in a timely fashion.

Synchronous communication: The teachers and students communicate freely via an online chat or via live audio-video conferencing. It enables you to collect the course material effectively at a specific time to communicate. In this way, a teacher can deliver vital knowledge, speak or share with his or her students a single learning experience. This means that synchronous communication gives teachers and students actual possibilities of active participation in the virtual reality only in an e-learning system.

Postive Impact of Digital Education
The use of digital technology is playing a quite vital role in the field of education in so many ways. It helps students, teachers, guidance and counselling personnel, educational planners and research workers for performing their responsibilities as adequately as possible. As now, education institutions changed to a mixed or blended learning mode. It inspired all teachers and students to become more tech-savvy.

Goodbye, Heavy Bags, and Hello, Tabs!
Parents are frequently concerned about the weights of school bags, which can easily exceed 6 kg or more in most circumstances. Students can now minimise the load on their backs by using lighter and sharper materials such as tabs, owing to technical improvements. Students all across the world are increasingly preferring virtual or digital education. During this Covid-19 pandemic, internet learning is an excellent alternative due to its flexibility and convenience of use, as well as the availability of rich and in-depth content.

Globalized Learning, Extensive Exposure
Students from all around the world may now contact with one another because of internet connectivity. This makes it quite simple to study various languages and broaden the horizons of young brains. Students who want to interact or meet with their global colleagues will benefit from video conferencing.

Unlimited Library on a Click
School libraries may have outdated books or may be lacking in a specific portion of information, but online research can be a blessing to students who wish to compose an essay or work on their research paper. If the school has a computer lab, pupils can gain access to a vast array of publications and content sites where they can conduct their study.

Learning may be Enjoyable
Many teachers and parents introduce their children to computers at a young age by using educational games that are entertaining and instructional. Teachers can utilise these activities to develop a passion of learning in their students. The audio-visual representations keep youngsters interested in what they are learning.

Learning without Boundaries - Distance Education
Previously, before the introduction of technology, students may enrol in a correspondence course, in which they would get study materials via postal address and would be required to send assignments via same route as well. However, this was a lengthy and hard learning procedure. Students can now readily attend online classes on a wide range of subjects, due to advances in technology.

Usage of Electronic Media for Information Exchange
While exploring the digital education technology, students may readily share learning materials and address associated questions using email, SMS, telephone conversations and using social media such as WhatsApp or Facebook.

Negative Impact of Digital Education
The epidemic of Covid-19 has already been deeply affected by the closure of the education system at practically every level, now that the health emergency is translating into a major worldwide recession, damage will be far greater. This essay highlights the shocks that affect education systems and how governments might react to them.

School Closures
Closures in schools will have a lot of negative effects on children and young people. Some of these effects will be worsened by policies that distance students from social welfare or other sources of support. Classes were delayed and examinations were postponed at different levels. The annual examinations and entry tests have already been deferred by various boards. Admission has also been delayed at the institutional levels.

Learning Impacts
Academic learning has been halted as a result of Covid-19. Not every teacher/student is excellent, or at least not all students are willing to move from face-to-face to online learning. Most teachers are only lecturing on video platforms, such as Zoom, Google meetings, etc. without any specific knowledge of online learning platform.

A Distraction to Learning
Digital learning might sometimes constitute some diversion. Sometimes, the student starts spending more time than he ought. At times, he lost his curiosity totally in his books and lectures in the classroom. He will miss vital things in this way.

Research Activity Hampered
Academic and research work have essentially stopped in higher education as well. Academically, all the activities get halted at the global level and studies were terminated or substantially interrupted as a result of COVID-19.

Learning Inequalities has Increased
Here, the richest and most educated families are in a position to face the difficulties of this shutdown and preserve the learning of their children at home. They are more likely to have computer and networking facilities and
other home study materials and to employ virtual private instructors to continue the education. On the other hand, some families cannot even buy their children a cell phone and suffered much as a result. Differential access to remote learning and conditions could enlarge this difference further because of Covid-19.

Suggestions

- Digital technology and learning tools play an important part in education, and can be implemented via the digital medium if quality education is disrupted.
- Among the different government priorities for education, the digitization of education must be prioritised.
- India lags behind in terms of quality education due to widespread lack of access to digital technology. In this regard, the government of India should provide greater outreach services of digital tools and technologies to the country’s underprivileged population.
- The introduction of digital technology at all levels of education can provide equality and education for all.
- The worldwide educational environment can be reformed and modernized through digital education.
- The Govt should address certain key issues on tactics for distance learning, including Internet access and access to digital equipment, the need for safe learning spaces, etc.

Conclusion

Educational technology provides vital information and skills for the improvement of education processes and products. This means aiding the teachers in their teaching and students in their learning roles by giving the theoretical basis necessary for developing personal abilities to achieve the teaching-learning goals as effectively and cost-effectively as possible. It is, therefore, a great challenge to equip teachers and students with the needed expertise of education technology. During the Covid-19 period, digital education has played its role in all the aspects of life and mostly at the academic level. A single person (teacher or learner) or institution can scarcely afford multiple resources. It is essential that appropriate resource centres be established in the local, regional, State and central sectors (in the form of resource centres that operate in schools-DIETS, SIETS, SCERT, State Educative Technology Cells, CIET, etc.) to meet the needs of individuals and institutions to use education technology services for achieving the target. More study is required to define the educational requirements for the digital age and to predict where deficiencies may arise. All state institutions must work together to support particular adjustments to this stage, ensuring that digital education facilitates the accessibility and social inclusion of individuals in the fullest sense.

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