

## **Advantages of Technology in Higher Education**

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### **Abstract:**

Education is the backbone of a developing economy. Therefore, there is a need to continuously improve the education system. So we need to shift from traditional classroom system to smart technology classrooms. Moreover, this pandemic has proven that the future of the classroom may be online or take over with artificial intelligence. Although the use of technology in education dates back to the 1920s, digital technology is only in the last 40 years. which has the greatest potential for educational transformation. This period has seen revolutions in content delivery, learning management systems, testing methods and language instruction. From augmented reality to personalized learning, technology has shaped our learning experiences. Recent advances in artificial intelligence have expanded the capabilities of educational technology.

The present research systematically focuses on the use of technology in higher education. In particular, this research focuses on the impact of technology on the education system. With the help of technology, the importance of education in all kinds of diverse backgrounds has expanded. The use of technology will benefit students as well as teachers to prepare their teaching modules, prepare tests, share study material with students, conduct lectures online. Since the devastating spread of Corona across continents since 2020, the use of technology has increased. Technology has transformed teaching and learning by providing access to education that transcends gender disparity, cost and physical limitations. Therefore, the advancements made by technology in all fields in recent times have been seen to be of maximum benefit. Education and use of technology can have great benefits in the future. For this, the use of technology in higher education will be joint.

**Keywords:** Higher Education, Technology

### **Introduction**

In this era of technological advancement, media as technologies have dramatically affected the human behavior and have easily drawn a connection between the virtual world and the real world. Digital technologies are not only the daily tools of communication, information and entertainment for people but have become omnipresent and an integral part of people's lives. In today's digital world, the media can give you ideas, it can inspire you to do certain things and drive you to initiate what you see.

### **What is Educational Technology**

Educational Technology is the field of study that investigates the process of analyzing, designing, developing, implementing, and evaluating the instructional environment, learning materials, learners, and the learning process in order to improve teaching and learning.

### **Why is Educational Technology in Education Important**

Educational technology in education is important because it helps today's teachers to integrate new technologies and tools into their classroom. Teachers are able to upgrade and improve the learner-centeredness of their classroom. It enables teachers to engage their students in unique, innovative, and equitable ways. Teachers are also able to expand their network and connect with other teachers and educators nationally and globally.

The technology world has changed dramatically in recent years. With more individuals becoming interested in digital media, educators must employ the most up-to-date tools in their job to engage beneficiaries and create awareness about benefits of technology. To interest learners in training, one must be imaginative and provide fresh

concepts so that students are excited about what they are studying. Educators must employ instructional technology because it is so important in today's education industry.

Technological advancements have had an impact on every aspect of life over the years. Technology has permeated every aspect of our lives as it has become more accessible, and as a result, we now demand every gadget we use to be as technologically advanced as possible. Institutions have embraced technology as an essential component of their educational process seeing the new demand in the advancement of technology and how it is a constant learning process.

### **Types of Educational Technology**

Technology has made the virtual learning process a real-time experience for the students. Many types of educational technology are there that a teacher can use to give the best possible learning experience to students, and a few of them are below.

#### **1. Smart Classroom**

Classrooms should have the technical equipment to support various forms of educational technology. There are many technological aids for teaching, and the beginning is with the computers, tablets, projectors and software that connect them all. If lessons are well-designed, learning every subject is possible through multimedia lectures.

#### **2. Gamification**

It is one of the best forms of educational technology. It involves the conversion of school lessons into a format similar to video games. In this kind of learning, students show great interest. Online badges as a reward and ranking of the best students have to motivate students to perform better. Students' interest in learning increases with gamification. Nowadays, many companies offer software solutions through which teachers can present the learning environment in a video game format.

#### **3. Augmented and Virtual Reality**

The achievements of this technology in education are helpful though it is still in the developing mode. Augmented and virtual reality allows students to visit remote areas or observe the life of ancient civilizations. Achievement of this technology-based learning is possible with the help of headsets that permits users to view content in 360 degrees. Virtual reality is a virtual classroom experience, while Augmented reality uses computer graphics.

#### **4. 3D Printers**

In many areas of modern education, creating and printing 3D models is very common. This technology in education has many benefits. It allows students to make different objects, from sculptures to 3D building models. Through this, the creativity of children will develop. 3D printers throw up various opportunities for students in education and other professions.

#### **5. Mobile Phones**

Nowadays, every student has a mobile phone. So, making use of this for educational purposes can fetch good results. Children can upgrade their skills and research education-related content with the help of mobile phones outside the classroom. Students can use mobile phones to take necessary pictures for art classes. They can learn language and information in the world using Alexa or Ok Google, a form of technology in education.

#### **6. Robotics**

We cannot imagine modern science classes without the learning of robots. Students will know the basics of programming through the creation and programming of robots. It allows gradual development of students' skills necessary for future professional careers. With the help of technology in education, you can make students ready for future projects.

### **7. Cloud Computing**

Cloud computing has opened doors for higher education more than any other technology in education. The accessibility of information from anywhere has made it possible to access material from any device and from anywhere. Along with easy access to collaboration, it has solved the problem of data storage.

### **8. Learning Analytics**

Learning data is necessary to make decisions. The large volume of education data gives birth to learning analytics as it is essential to evaluate students' learning output. We may see data analytics warning children about the homework deadline soon. Learning analytics will boost the engagement of learners in education. It has become possible because of technology in education.

### **9. Custom Learning Experience**

The online teaching and learning methodologies will be the same for all students in the traditional education system. But through modern education, we can use custom online teaching and learning experiences. One can start learning based on their preference and need with modern gadgets.

### **Higher education**

Higher education, any of various types of education given in postsecondary institutions of learning and usually affording, at the end of a course of study, a named degree, diploma, or certificate of higher studies. Higher-educational institutions include not only universities and colleges but also various professional schools that provide preparation in such fields as law, theology, medicine, business, music, and art. Higher education also includes teacher-training schools, junior colleges, and institutes of technology.

### **Review of literature**

Reviewing relevant research studies is very important when starting a new research. Because reviewing past studies in new research helps develop insights into new research. Tools and techniques used by previous researchers can be identified through reviews of studies. All this information helps in formulating research proposals and conducting new research. Also literature review provides important help in finding gaps in research studies. In the present research, technology, its types and benefits of technology use, etc., are reviewed as follows.

Raja R., Nagasubramani P. C. (2018) researched the impact of modern technology on education. Technology has a positive impact on education but at the same time it can also have a negative impact. Teachers and students should take advantage of this in a positive light and eliminate the pitfalls that hold many students and schools back from achieving excellence. Thus it was concluded that in the future, the time has come for every country to start a more technologically equipped education sector.

Dr. Ashneet (2020) researched on "Impact of Modern Technology on Student Performance in Higher Education". Data for the presented research was collected from various colleges near Delhi and NCR with a sample size of 112 students. Correlation and regression were used in the present research to study computer-assisted learning, usability, self-efficacy, technology effectiveness, and user frustration on student performance. Findings show that usefulness of smart classrooms contributes most to higher education performance, followed by self-efficacy and CAE. However, user frustration has a negative impact on student performance.

Saurabh Aditya (2019) "Effect of Media on Human Behavior" The main objective of this research was to study the effect of media on human behavior. It also aimed to create a distinction between the virtual and the real world. This study will be able to determine whether the trending mass media influences the behavior of the youth whether it parallels the virtual world or the practical-real aspect. The research design used in the

present research is "Survey by Questionnaire" with a random sample of 60 people in the age group of 15-24 years (youth). The questionnaire includes questions related to the subject's behavior, affect, preferences, and thoughts. This research anticipates that behavioral changes in youth are brought about by the media and these changes are significant which motivates them to behave accordingly. The results of this study provide some fascinating insights into media-induced behavior change. It is clear that media influences the behavior of individuals. And as research predicts, time is an important factor in influencing the effects of media on a human being and thus changing his/her behavior. It can be seen that the longer the duration of access to the media, the greater the behavioral impact on the individual.

### **Aim of The Study**

Main aim of the present study is to explore the utility of technology use in higher education as well as the benefits of various technological tools in higher education.

### **Benefits of Technology**

Technology is an amazing invention of human creativity. Technology is the mother of culture, art and science. Technology has certainly changed the way we live. It has affected various aspects of life and redefined living. Undoubtedly, technology plays an important role in every sphere of life. Technology can automate many manual tasks. Also, many complex and critical procedures can be performed easily and more efficiently with the help of modern technology. With the use of technology, living has changed and it has changed for the better. Technology has revolutionized the field of education. The importance of technology in schools cannot be ignored. In fact, the introduction of computers in education has made it easier for teachers to impart knowledge and for students to absorb it. The use of technology has made the teaching and learning process more enjoyable.

### **Advantages of Technology in Education:**

Today's huge diversity of educational technology provides students with a plethora of options from which to select the finest ones for their learning requirements. This assists learners in developing the necessary skills and information to become competent professionals in their chosen industry.

### **Helps in improving learner's Communication Skills**

Learners who can communicate more effectively through electronic methods will perform better academically as well as in employment contexts because communication skills are critical when you want to get your point across effectively.

### **Fun and engaging learning experience**

Today's students must not only learn, but they must also have pleasure while doing so. Educational technology allows learners to have fun while learning, which helps them stay motivated and interested in learning a new skill.

### **Helps to access the internet from any location at any time**

The internet has become such an indispensable part of our lives that it is difficult to find somebody who does not use it regularly. In today's environment, everyone must be able to access the internet from anywhere at any time to do their projects and research without having to travel all over a place or wait for a particular time when they can do so. Learners benefit from educational technology in this sense since it allows them to access the internet even while they are in a classroom, at school, or at home.

### **Helps in learning new skills and gaining more knowledge**

Learning new skills and knowledge are two very important areas of life that mentees should be able to appreciate. Learners can gain these abilities and expand their knowledge through numerous online programs by utilizing educational technologies. These programs provide students with the opportunity to learn about a variety of topics that are both intriguing and relevant to their fields of work or study.

### **Helps in improving overall wellness**

The advantages of employing instructional technology can include bettering learners' mental and physical wellness. Learners can improve their academic performance and physical health by using these tools, which assist them to improve their learning and cognitive skills.

### **Staying up-to-date with technological advancements & Efficiency in administration tasks**

Technology streamlines administrative tasks for educators and institutions. Digital tools for attendance tracking, grading, lesson planning, and record-keeping save time and reduce paperwork, enabling educators to focus more on teaching and student support.

### **Helps in getting instant feedback and assessment**

Technology enables quick and timely feedback on assignments and assessments. Online quizzes, automated grading systems and learning management platforms provide immediate feedback allowing students to track their progress and make necessary improvements within a short time.

### **Discussion**

Technology has become an indispensable part of our daily life. Nowadays life has become complicated without technology. Technology has intervened in almost every sphere of society and education is no exception. Many technologies have changed the approach to schooling, student learning, and classroom environments. Many schools focusing on 21<sup>st</sup> century skills have started using modern education combined with the concept of educational technology. Teachers are free to choose hardware and software to make their classrooms attractive. Today, technology and education go hand in hand. With the help of technology in education, students can also learn according to their needs and interests. The relationship between technology and education has been a topic of interest for decades. Therefore, in order to facilitate education through technology, the presented research has considered some of the various types of technology to provide the best learning experience. Such as, learning management systems, smart classrooms, gamification, augmented and virtual reality, 3D printers, mobile phones, robotics, Cloud Computing, Learning Analytics, Custom Learning Experience. etc., some of the advantages of using technology in the teaching and learning process can be seen such as, it helps in improving the communication skills of the learners, fun and engaging learning experience, it helps to use the internet from anywhere anytime, it helps in learning new skills and gaining more knowledge, it helps in improving the overall wellness, keeping up to date with technological advancements and efficiency in administration as well as help in getting instant feedback and evaluation etc. Therefore, considering the types of technology, its uses and its benefits overall, technology presents you with remarkable opportunities and its integration needs to be approached thoughtfully and responsibly.

Also due to the flexibility and detail of online education many students prefer to join online classes as the intervention of technology has made everything easy to understand. Digital learning tools will increase student engagement and facilitate personalized learning. Teachers can also improve their lesson plans and make them more informative with the help of technology in education.

### **Conclusion**

Technology is considered a catalyst for change and development and is expected to accelerate the process of educational well-being and empowerment of all. Technology can also contribute to the empowerment of people, the spread of innovations and the ideology of progress and modernity. Considering the benefits of using technology in education as a whole, technology-enabled education will become more interesting in the future.

**Reference:**

1. Raja R., Nagasubramani P. C. (2018) The Impact of Modern Technology on Education. *Journal of Applied and Advanced Research*, Phoenix Research Publishers. ISSN 2519-9412 Pg. 33-35
2. Saurabh Aditya (2019) Effect of Media on Human Behavior. *The International Journal of Indian Psychology* ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) Volume 7, Issue 3, Pg. 533-549.
3. Kaur Ashneet (2020) Impact of Modern Technology on Student Performance in Higher Education. Research Gate. <https://www.researchgate.net/publication/343415987>
4. Qurbani Waffa (2021) Impacts of using technology in higher education. <https://pressbooks.pub/techcurr20221/chapter/>
5. <https://www.loyola.edu/school-education/blog/2021/what-is-educational-technology>
6. <https://gibbon.edugorilla.com/blog/different-types-of-technology-in-education/>
7. <https://www.britannica.com/topic/higher-education>