

## SIGNIFICANCE OF IMPLEMENTING WEB-BASED TECHNOLOGIES ON EDUCATION SYSTEM

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**Abstract.** *Technology has the potential to significantly change education. It may support the development of positive connections between teachers and students, rethink how we collaborate and learn, close long-standing gaps in equality and accessibility, and modify curricula to better suit the needs of all students. The years 2019 to 2022 saw a technological advancement due to the use of scientific platforms and the creation of virtual interactive lectures. Universities also started to develop scientific platforms and hold virtual workshops and seminars. The primary idea behind technology-based education is to enable students to get knowledge from the internet whenever they need it. This enables students who find it difficult to learn with books, as well as pupils who are differently abled, by allowing them to learn through the use of gadgets or software.*

**Keywords:** *technologies, web-based technologies, education system, e-learning, blended-learning, advantages of e-learning.*

As the world evolves, so do the ways we employ to educate students. It is common knowledge that technical advancements have occurred at a quick speed in the last few decades, and as a result, instructional technology has evolved. In modern times, we are all connected with technology in our daily lives. So why not incorporate technology into education? Technology is the sole tool that can help to improve education in a variety of ways. Technology has a significant impact on education, from teachers to pupils. Education is becoming more adaptable and observant as a result of modern EdTech. Various technology-driven education technologies have brought free online resources, individualized learning materials, more engaging information, a better understanding of graphics, and advanced learning opportunities. Implementing technology in the educational classroom can both benefit and support learning and teaching techniques. The third millennium is bringing with it a massive revolution in knowledge and technology that is marked by rapid development through numerous local, regional, and worldwide changes. This revolution has helped define the features and characteristics of the education area. To remain competitive and deliver the finest education possible, these changes compelled educational institutions to adapt and push them to embrace contemporary techniques and approaches. Education in the knowledge revolution era, however, faces many challenges due to the tremendous advancements in ICT, which have reduced the world to a small village due to globalization and scientific and economic openness. This, in turn, has a negative impact on education and continues to grow because of the belief that a true renaissance in any nation can only occur through a real renaissance in education. Governments started to consider modifying educational systems and switching to blended learning, where the teacher serves as the primary information source and acts as a supervisor, guide, facilitator, assistant, and complement to education through the use of contemporary online teaching strategies. High-quality education pays off and brings about a great renaissance. The evolution of school curricula and decisions is centered on the Internet era, and this new assignment reflects the major role that education must play [6,50].

Many different types and patterns of e-learning have arisen, including blended learning, which has captured the attention of many educational establishments. Blended education focuses on offering learning in interactive, flexible, and exciting ways, and it assists in creating appropriate learning environments for students. Blended learning is based on the integration of learning experiences in a face-to-face classroom lesson and learning experiences via networks and the Internet; this allows for active independent learning, the development of personal relationships, and the encouragement of students to exchange ideas, information, and experiences.

Firstly, technology has made education more accessible. Students can access learning materials and coursework from anywhere with an internet connection using online learning platforms and educational apps. This was especially true during the COVID-19 pandemic, when remote learning became the norm. Aside from making education more accessible, technology has also made it more engaging and interactive. Technology is improving the learning experience in a variety of ways, including interactive whiteboards, virtual reality simulations, and educational games. These tools enable students to visualize complicated topics and engage in previously impossible hands-on learning experiences.

It is well-known fact that learning can be quite difficult if it is carried out using the wrong strategies. But in order to make it effective, it is necessary to choose the right approaches. There are several ways to choose these mentioned correct approaches, and one of such correct approaches to mastering the target language is reading books [1,182p].

The followings are some of the benefits of modern learning through technologies:

It employs a variety of educational and cognitive tools, allowing the learner to select what best suits his or her abilities and skills: It enables pupils to get more knowledge and improves the educational process.

One key advantage of using technology into course design is that it aids in the creation of a truly engaging learning environment for students. It's tough to deny that technology has had an impact on how we educate and learn. Technology in the classroom can help teachers introduce things in more dynamic and inventive ways. With all of the options available (and more on the way with advancements like virtual reality), it's an exciting time to be a teacher planning a course.

Technology is everywhere, which is why it is critical that it has an impact on students' continuing learning environments. Using technology in the classroom can assist students in becoming better acquainted with common programs that they will use in their future employment. Teachers want to prepare their kids, and technology is a terrific tool to do so. Students should have the choice to study the fundamentals because it will play a significant role in their life as they progress. Computers and the internet will be an essential element of their future professional and personal lives.

A collaborative effort is required to create an engaging learning environment. Technology is a better technique to promote and facilitate discussion among students. They will collaborate with one another using technology and discuss various ways they might collaborate and learn together.

Many students learn best when they interact with technology. It is critical that technology be incorporated into the course design in order to reach the maximum number of students possible. Technology can provide a number of teaching and learning strategies that can help teachers deliver topic material to a bigger audience (more on that later). Some teachers want to reach as many pupils as possible, and technology provides an excellent alternative for them.

Students at all levels can have their unique requirements and learning preferences accommodated by flexible teaching methods.

Providing practice and training in the educational setting allows for training in the study environment, practical training and actual practice of skills, and suitable reinforcement for performance in order to attain educational goals.

Modern learning and teaching methodologies are necessary for blended education, as the credibility of evaluations greatly contributes to their credibility in the education assessment system. The student-centered teaching technique is one of these tactics that promotes learning acceleration and helps people acquire information more quickly.

Educational technology provides teachers with a plethora of e-learning tools such as Gamification, AR / VR, smartboards, and so on. Teachers can utilize many digital tools to enhance learning chances for pupils using advanced current education technology. Teachers can improve their teaching skills by using e-learning solution technologies. Teachers can effectively instruct students using technology such as video classes, microlearning, appealing infographics, and so on. Furthermore, professors can engage students by offering online assessments and various courses. Education based on the traditional role of teaching as a carrier of information and knowledge is no longer appropriate for the era of teaching innovations that require the learner's interactive and positive participation and communication in obtaining information from its various sources to develop. The advent of e-learning, digital curriculum, distant learning, smart classrooms, and other modern educational means and methods represents the use of skills in modern educational means and techniques. In terms of creating his preparation programs in the faculties, one of the most important difficulties confronting the institutions of his preparation is the preparation of the teaching in light of this technological progress in education. The emergence of modern educational strategies based on combining the benefits of e-learning and the benefits of traditional education, known as blended education, with the goal of achieving an elevated level of communication and electronic communication between information sources and students is explained. Blended learning patterns include the blending of e-learning and traditional education, as well as a mix of self-learning and cooperative learning programs [2,27]. The most common sort of connectivity between e-learning and traditional education is integration of synchronous and asynchronous e-learning programs. There are many models for this common type of blended education that combines e-learning and traditional education, but the difference in starting one before the other or synchronizing between them has not been precisely determined so far, especially since one of these models may be detrimental to the results of some students. Sometimes the contrary occurs, and what is ineffective in the collecting aspect becomes beneficial in the performance aspect, necessitating the need for such a study [6,47].

Traditional learning relies on learners or students being there daily or at scheduled times throughout the grade as a venue to acquire science, however e-learning seeks to give education through communication means. Traditional education often prints instructional content in writing, whereas e-learning provides educational material in the form of books, documents, electronic papers, websites, and various electronic sources as auditory or visible. Because traditional classrooms in urban areas cannot accommodate students who happen to be in class at the same time as the teacher, e-learning relies on synchronous and asynchronous learning [4,34]. Distance learning is frequently less expensive than traditional learning. The teacher's role in this education was distinct from that of the corporation and the sole source of information, as well as that of the

supervisor's goal, and the student's prompt assistance in overcoming all barriers and challenges that stand in the way of the arrival of the scientific article. E-learning, in addition to its many other sources of information, including the Internet, relies on self-learning, which fosters more effective student involvement. More adaptability makes it easy to update and adjust training or instructional materials that provide the same education as well as admission possibilities to youngsters competing for scarce spaces in urban schools. It also facilitates in the rapid detection of outcomes and errors, as well as the immediate assessment of students' ability levels. Learners can learn, train, and qualify without having to leave their employment or roles. It allows him to ask the teachers whatever questions he wants whenever and whenever he wants [5,65].

These students overcome their shyness and introversion as a result of the intimate interactions and educational atmosphere and approach the lecturers with inquiries. They answer questions alongside their classmates and provide responses, which are then examined to determine if they are correct or incorrect. Because of this one-of-a-kind encounter, as well as the numerous ways people communicate themselves—from words to movements, signs, and feelings—presence education is critical. It enables the teacher to give any messages he wishes to the class that are simple for the students to learn and remember [8,108]. Thus, e-learning is a modern revolution in teaching approaches. In this educational pattern, educational lessons are displayed for students over the Internet in the form of educational graphics and files, among other forms. E-learning's character is determined by how information and instructional materials are given electronically or by default. Communication, information collecting, skill learning, and engagement between the learner and the school, as well as between the teacher and the university, are all made possible by the use of electronic media. This pattern is known as default education and readiness since it does not necessitate learning in a classroom or other venue for instruction [7,57]. The teacher must believe that every student is gifted, but in his own way, and go towards the ultimate goal- to enable the gifted student to develop further. A foreign language has a developing and educational potential for revealing students' talent. The teacher focuses on the formation of communicative competence and using web technologies in order to get his students attention [3, 374].

### **Conclusion**

To summarize, technology is transforming education in unprecedented ways. We must welcome technology innovations as educators and seek to ensure that they are used to support and enhance student learning. We can achieve a more egalitarian, engaging, and successful educational system that satisfies the needs of all learners by doing so. Web-based education provides several learning possibilities as well as access to a tremendous amount of knowledge and information. It also provides several opportunities for people with disabilities by offering technical devices, software, and so on. This technology enables students to communicate with specialists in order to clarify their doubts. Technology helps to save both time and paper. It also motivates students to improve their abilities. The purpose of this article is to investigate the impact of e-learning on the quality of higher education, as well as the role of new technology in boosting educational quality.

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