



THE ROLE OF EDUCATIONAL TECHNOLOGIES IN MODERN EDUCATION

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Received: 10 th May 2022	Educational technology (also called learning technology) refers to the study and ethical practice of improving learning and performance through the creation, use and management of appropriate technical processes and resources. The term educational technology is often associated with learning theory. Educational technologies include the teaching and learning processes and systems used to develop human skills
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Educational technology is most simply defined as a set of tools that can be useful in a student's learning process. Educational technologies rely on a broad definition of the word "technology". Some modern equipment includes but is not limited to overhead projectors, laptops, computers [1]. New devices such as "smartphones" and games (both online and offline) are seriously attracting attention due to their detection capabilities. Technology in disciplined areas, educational and manufacturing technology, means "applied science". In other words, any process or processes resulting from original research using the scientific method can be considered a technology. Educational or human technology may be based solely on algorithmic or self-empirical processes, but neither is necessarily physical technology. The word "technology" comes from the Greek word "techne", which means craft or art. Another word "technology" also comes from the same root, which can be used when considering educational technology. Therefore, educational technologies can be expanded to include teacher methods. Bloom's 1956 book *A Taxonomy of Educational Objectives* is a classic example of an educational psychology lesson. Bloom's taxonomy can be helpful in designing learning activities based on learners' learning goals and what is expected of them. However, Bloom's work is not directly related to educational technology per se, but more to do with pedagogical strategies. According to some, an educator technologist is one who transforms basic pedagogical and psychological research into evidence-based applied sciences (or technologies) for teaching or instruction. Educational technologists often have bachelor's degrees (postgraduate, PhD, PhD) in educational psychology, educational media, experimental psychology, cognitive psychology, or more specifically educational, learning or human technology or instructional (systems) design [2]. But some of the theorists listed below have always used the term "educational technologist" to describe themselves, preferring such a term as "teacher". Skinner's work allowed a focus on articulating the behavioral goals of "programmed instructions", breaking down learning content into smaller chunks and often quickly rewarding correct responses. Digital communication and networking in education originated in the mid 80s and became popular in the mid 90s, especially through the Internet (www), e-mail and forums [4]. Today, communication via computers is the predominant mode in the regular school system, where the main form of interaction between students and teachers is through computers. CBT/CBL usually means individualized learning (self-learning), while CMC involves a teacher/private tutor and requires a flexible approach to learning activities. In addition, using modern ICT tools, provides training to support study groups and related knowledge management work. It also provides tools for student and curriculum management [6]. In addition to enriching learning, learning technologies play an important role in face-to-face distance learning. Small group oriented courses often use mixed or hybrid designs that combine the current curriculum with distance learning and different pedagogical styles are used. Some literature uses the concept of integrated learning to describe blended learning scenarios that integrate both school and standard settings. [eight]. There are three main schools of thought or philosophies in the education technology literature. These are behaviorism, cognitivism and constructivism, each of the three schools of thought is present in today's literature, but they have developed in the same way as the psychology literature. It is important to note that computer science and information technology have had a great influence on the theory of cognitive science. Today, researchers are focused on topics such as cognitive load and information processing theory [6]. A constructivist learning environment requires learners to use their previous knowledge and experience to create new, relevant and/or adaptive learning concepts. Combinationism is a "learning theory for the digital age" developed by George Siemens and Stephen Downes from their analysis of behaviorism, cognitivism, and constructivism to explain how we live, how we communicate, and how we learn. technology on it, has been developed. The executive editor of the *International Journal of Learning Technology and Distance Learning*, says the theory "combines relevant elements of multiple learning

theories, social structures, and technologies to constitute a powerful theoretical framework for learning in the digital age." Problem-based learning and query-based learning are active learning educational technologies used to facilitate learning. This is an area where new thinkers emerge every day. Many ideas are shared by theorists, researchers and experts through their blogs. The goal of educational technology is to improve the state of education that would be without technology. Instructors can post course materials or important course information on the website, which means the student can study anytime, anywhere and quickly access study materials. Computer learning can give students instant feedback and explain correct answers. In addition, the computer is patient and non-critical, which can motivate the student to continue learning. The use of information technology will become important. The training material can be used for distance learning and is available to a wider audience. It is convenient for students to edit their written work in a text editor, which can therefore improve the quality of their writing. According to some studies, students are better at understanding and editing written work exchanged between fellow students over a computer network. A variety of educational software has been developed to help children and teenagers learn certain subjects. While technology in the classroom has many advantages, there are also obvious disadvantages. Lack of proper training, limited access to enough technology, and the need for additional time to re-introduce technology are some of the reasons why technology is often not widely used in the classroom [7]. Since technology is not the end goal of education, but a means to achieve it, teachers need to be well versed in the technologies used and their advantages over more traditional methods. If there is a deficiency in either of these two areas, the technology will be seen as an obstacle rather than an advantage for learning purposes. Another difficulty arises when access to a sufficient amount of a resource is limited. Some technologies may require initial setup or training time [5]. Even after these tasks are completed, teachers should have an alternative lesson ready in case a technology failure is discovered during the lesson. Many types of computer and non-computer technologies are currently used in traditional classrooms. This includes: Wireless Microphone in the Classroom: A daily occurrence in classrooms, with the microphone, students can hear their teachers clearly. Children learn best when they listen carefully to the teacher. The advantage for teachers is that they no longer lose their voice at the end of the day. Mobile devices: or smartphones [3]. Mobile devices such as answering devices or smartphones can be used to enhance classroom learning by allowing professors to receive feedback. Smartboards: interactive whiteboard with touch control for computer applications. Displaying everything that can be done on a computer screen enhances the classroom experience. It not only aids in visual learning, but is also interactive so that students can draw, write, or manipulate images on the smart whiteboard. Internet media: Displayed video websites can be used to enhance lessons in the classroom. These can be digital cameras, camcorders, interactive whiteboard equipment, document cameras, or LCD projectors [8].

LIST LITERATURE

1. Begmatova , N. Z. (2020). Pollution and environmental protection. Causes and consequences. *Science symbol* , (6).
2. Ibragimova, N. A., & Ibragimov, Z. Z. (2020). Development of algorithms for digital signal processing in the problem of optical laser triangulation. *The Matrix of Scientific Knowledge* , (6), 49-53.
3. Akhmedov, A. A., Kudratov , E. A., & Kholov , D. M. (2016). Innovative technology of modern laboratory work in physics. In *Innovative technologies in science and education* (pp . 228-230).
4. Turopov , U. U., Burliev , A. U., & Ibragimova, N. A. (2019). Software tools for teaching students programming languages C, C++.
5. Ibragimov, Z. Z., & Ibragimova, N. A. (2020). Overview of three-dimensional scanning methods. *Enigma* , (27-3), 191-194.
6. Iskandarova , Z. A. (2020). Methods for improving the reliability of user identification of computer systems by writing passwords. *Enigma* , (27-3), 162-172.
7. Tavboev , S. A., & Iskandarova , Z. A. (2019). Image processing using fuzzy set theory. *Basic and Applied Research in the Modern World* , (27), 42-45.
8. Allaberganova , G. M., Kutbeddinov , A. K., Karimov, A. M., & Kudratov , E. A. (2015). Interactive teaching methods for students of natural specialties based on the radiation factors of the ecosystem. *Pedagogy and Modernity* , (1), 39-43.