

Applying Digital Technology Opportunities to Education System of Azerbaijan

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ABSTRACT

One of the areas in which the development of information and communication technologies (ICT) has made the greatest contribution is education. The introduction of new technology in education increases the quality of the educational process and creates conditions for the adoption of ICT by the younger generation.

Modern technology opportunities have changed education process. It has opened new ways to a massive amount of information through online books, podcasts, images, and videos. Some years ago technology was only used for completing assignments. But nowadays it is used for various aims, from learning to communicating and collaborating.

Technology has also opened up numerous opportunities for communication and collaboration. For instance, students in a classroom in rural part of the world can learn from an article published by a other developed countries. Students can communicate through email and even have a lecture, or class virtually via video conference. Furthermore, technology has changed the role of teachers and students. Traditionally, teachers were the centre figure of the learning process, and it was called teacher-centered model. However, with the digital technology sources, information is accessible to everyone, and it gives us more chances for student-centered learning model. In this case the role of teachers is as a guide, and

students try to search, to analyze the materials themselves.

Of course, the State Program implemented by the Ministry of Education regarding the electronicization of education has created a serious change in this field. During the implementation of the program, modern technological tools were installed in many schools from the capital to the regions. There is no such school that does not have a computer room for the use of students, and does not have an Internet network installed. In most of the capital's schools, the high stage of the electronicization of the educational process has begun.

The main purpose of the study is to search literature materials and policy papers about this topic and making description.

Keywords: modern education system, digital technology, ITE-Innovative technologies in Education.

LITERATURE REVIEW

According to the information provided by the policy papers, schools and teachers should prepare students for modern life in order to live comfortably in the present era. For this purpose, students should develop modern skills, free thinking style and the ability to use modern techniques and technology correctly to achieve the goal. From this point of view, the training aimed at increasing the ICT literacy of the teaching staff is of great importance. The purpose of conducting such trainings is to increase the theoretical and practical skills of teachers, as well as their knowledge of information

technologies, in order to increase the effectiveness of the application of subject curricula (Mammadli, 2018).

One of the positive points is that non-ministerial organizations related to e-learning are also engaged in this work and contribute in this field. One of them is the ITE further education center (Haleem, 2022). ITE (Innovative Technologies in Education) educational center was founded in 2012. The motto of the center is the transformation and development of education through the strengthening of human resources. This center supports capacity building of educators and education leaders, development of teaching and learning process, effective implementation of education strategy (Mollayeva, 2011). ITE aims to introduce completely new approaches in the educational process and operates in the fields of education, information technology and economic development. Its main principles are to apply a comprehensive approach, international experience and efficient partnership in its current activities. "Our goal is to be a reliable knowledge and innovation center, an expert, a professional consultant and a transparent partner. ITE additional education center attaches great importance to the professional development of educators, who are the main beneficiaries of the programs it implements, and considers mutually beneficial cooperation to be extremely necessary," ITE noted (Haleem, 2022).

ITE has been providing its solutions in the field of education, benefiting from the experience of effective international cooperation and the network of experts since its inception.

In order to further expand its activities in the private market of Azerbaijan in the field of increasing the professionalism of the teaching staff, ITE established its own training center. Trainings and new training packages covering various fields and regularly updated are brought to the attention of the teaching staff. Currently, the center offers basic, intermediate and

advanced training. In addition, there are opportunities for preparing and evaluating modern lessons on the curriculum, applying the subject curriculum, and using Promethean interactive technologies in the teaching process (Mammadli, 2018).

There are three main reasons why you should apply to an ITE additional education center:

First, a large and professional trainer base. ITE is an educational center operating in Azerbaijan with a wide network of more than 100 professional trainers. All ITE trainers have teaching experience and relevant certificates. ITE's trainer network covers all regions of Azerbaijan. This advantage makes it possible for them to organize additional educational services at an accessible and high level.

The second is the use of international experience and new teaching technologies. ITE is an additional education center operating in the educational market of Azerbaijan, applying international experience and new teaching technologies, designing training packages and conducting training in a professional format.

Third, cooperation with leading local and international institutions. ITE cooperates with leading local and international institutions such as the Ministry of Education of the Republic of Azerbaijan, the World Bank, UNESCO, "Microsoft", "Intel" (Mehrabov, 2007; Mammadli, 2018). Ministry of Education made special program for creating opportunities for professional development of teachers, also staff of the schools. After determining the initial level of the teaching staff applying for training, a training package of level I (initial), II (intermediate) or III (high) is presented according to their needs and ICT usage skills. In addition to these trainings, e-school and Promethean interactive whiteboard trainings are also offered for teachers.

During these trainings, the teaching staff acquires the skills of using information technologies available in schools, learns to use computer applications and other

programs that can be useful for preparing resources to make the teaching process more interesting and according to the interests of students in an active learning environment, and at the same time learns the possibilities of the Internet in education and the Web. They are familiar with 2.0 tools (Kamel Boulos, 2007).

At the end of the training, teachers will be able to build lessons in accordance with the requirements of the 21st century using information technologies, increase the interest of students in the educational process, and develop modern competencies in them (Al-Anezi, 2021).

As a result of the training, the teaching staff achieves the following changes in the teaching process based on the acquired skills and habits:

- ✓ Individualization of the educational process;
- ✓ Support to independent activity of students;
- ✓ Imparting special skills to students, including thinking independently, solving problems, working in a team, creating new ideas, forming habits of proper use of information, techniques and technology;
- ✓ Preparation of lessons in accordance with the requirements of the 21st century;
- ✓ Teaching of information and new learning methods in education with the application of ICT;
- ✓ Activation of students' cognitive activity;
- ✓ Making the educational process more interesting, colorful and intensive;
- ✓ Creating opportunities to explore and apply new teaching methods, techniques and methods that are convenient and useful for teachers;
- ✓ Encouraging students, mastering the methods necessary for their proper development (Scanlon, 2005; Bolivar, 2021);

ITE provides a wide range of educational services through face-to-face, online and flexible learning technologies. ITE

additional education center has been developing educational solutions by benefiting from effective international cooperation resources and expert network since its inception. ITE is open for collaboration. Achieving the presented goals and objectives, and providing high-quality services are taken as a basis. The Center declares that they are ready to cooperate with government structures, private institutions and international organizations that are ready to step towards new heights with them (Mammadli, 2018).

Currently, the center's partners include the Ministry of Education of the Republic of Azerbaijan, "World Bank", "AzEduNet", "Microsoft", "Intel" and "Edumedia".

According to the information provided by the center, schools and teachers should prepare students for modern life in order to live comfortably in the present era. For this purpose, students should develop modern skills, free thinking style and the ability to use modern techniques and technology correctly to achieve the goal. From this point of view, the training aimed at increasing the ICT literacy of the teaching staff is of great importance. The purpose of conducting such trainings is to increase the theoretical and practical skills of teachers, as well as their knowledge of information technologies, in order to increase the effectiveness of the application of subject curricula.

According to materials, and modern education standards, it is clear that technology has made the lives of learners easier. Students can take advantage of many tools that will help you generate more interest in their studies. They can see this in many ways. For one, using different tools and software to make the students' projects and presentations rather than using a pen and a piece of paper. They can also use different sources as, iPads and other devices, which are very light compared to piles of books and notebooks. Reading eBooks is a lot easier than reading a traditional book. Also, learners can easily access online libraries anywhere as these

don't require physical space. Teachers, researchers, and students from all over the world can access the same online library at the same time. It only takes a couple of seconds to copy, paste, or type information. Also, the computers of today are much stronger and more efficient when it comes to storing data. This is more convenient than managing hard copies in binders and other bulky storage options.

CONCLUSION

At the end of the trainings that are realized by the Ministry of Education Azerbaijan Republic, teachers will be able to build lessons in accordance with the requirements of the 21st century using information technologies, increase the interest of students in the educational process, and develop modern competencies in them. It should be noted that "ITE- Innovative Technologies of Education" additional education center is licensed by the Ministry of Education. At the end of the training, the training participants are presented with a certificate confirming their successful completion of the course.

Summarizing the benefits of digital technology in education the following items were determined:

Students can access a lot of information and resources that weren't available in traditional classrooms.

Digital technology has made education more interactive and engaging. For instance, this new model has made learning fun and interactive. It has also made it easier to understand and remember difficult subjects. Students can learn at their pace with digital tools like adaptive learning software and more.

As it is mentioned technology can transform education in many ways, from making it easier for teachers to curate learning materials to enabling new ways for people to learn.

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