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# THE IMPACT OF INFORMATION TECHNOLOGIES ON DISTANCE EDUCATION DURING PANDEMIC IN THE REPUBLIC OF UZBEKISTAN

*Elza Salakhova<sup>1</sup>, Manzura Shamsitdinova<sup>2</sup>, Mavjuda Shakhakimova<sup>3</sup>* 

<sup>1</sup>Senior Teacher, Foreign Languages Department of Tashkent University of Information Technologies named after Mohammad al – Khwarizmi

<sup>2</sup>Acting Docent, Foreign Languages Department of Tashkent State Law University, Tashkent (Uzbekistan).

<sup>3</sup>Acting Docent, Foreign Languages Department of Tashkent University of Information Technologies named after Mohammad al – Khwarizmi

E-mail: <sup>1</sup>e.zag2020@bk.ru, <sup>2</sup>manzshams@mail.ru, <sup>3</sup>shakhakimova65@gmail.com

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## ABSTRACT.

Today there is a huge selection of educational programs. Anyone can sign up for online courses on interests, go through various distance programs. This format allows a huge number of people to master their favorite specialty who do not have enough time and money to obtain higher education in the traditional way. Especially online education is relevant in light of recent events, when the world is gripped by a pandemic. For online learning, one can choose any suitable format, these are online webinars or Skype conferences, and etc. Therefore, the impact of Information Technology on distance education is very vital. The possibilities of IT in the implementation of distance learning are endless. Therefore, the effectiveness of distance education depends on how well the information technologies in online learning. The authors of the article are trying to make an overview of distance learning during a pandemic in the Republic of Uzbekistan. They analyze distance learning in general and on the example of a university, as well as some of the advantages and disadvantages of this type of education from personal experience in this format of education at a university.

## Introduction

The global pandemic COVID-19, as well as the restrictive response measures introduced in connection with the spread of coronavirus infection, has significantly changed the usual processes of the entire sphere of life around the world. And Uzbekistan is no exception here, since the global pandemic has come

to our republic as well. Like governments around the world, Uzbekistan has decided to close educational institutions in an attempt to stem the global COVID-19 pandemic.

The global outbreak of new virus brought education to homes. This isolation during the pandemic crisis has not stopped education due to remote teaching, which involves distance learning. This would not have been possible without the advanced technologies that we possess in the 21st century. The integration of the Internet into the distance learning process makes it possible to conduct online lessons, seminars, webinars, even contests such as subject Olympiads at such a specific time.

At an equally rapid pace, the Ministry of Higher and Secondary Specialized Education of Uzbekistan began to form online resources on higher education standards to launch the DISTANT.UZ, EDU.UZ MOODLE, telegram channel, which also publishes information on the latest changes in the sphere of education and posts materials for self-education of students. Each higher education institution independently organizes the distance learning process of its students by using various online platforms and video conferencing software through which distance learning processes are available, as well as other tools of information technologies.

Nowadays information technologies are transforming the educational process around the world. The current circumstances in 2020 became a kind of catalyst for the introduction of innovative solutions into the educational process. We are talking about cloud services, collaboration tools, artificial intelligence technologies, content creation and management, and, in general, technologies that support distance learning.

Distance training is considered to be one of the advanced technologies in education in the current situation. By maintaining social distancing and other precautions to stay protected from COVID-19 while teaching from home, learners can continue their learning through distance learning. To reduce the threat of a massive spread of a new type of virus, many educational institutions in our country are currently offering to continue education in the form of distance learning, to which students can access without leaving home.

Zoom video conferencing and applications such as Skype provide a platform for educators to deliver online classes with students. Zoom is an easy and userfriendly platform for online classes. The program is great for individual and group lessons, students can enter both from a computer and from a tablet with a phone.

#### **Research area**

What is the concept of "Distance education"? In order to identify the effectiveness and disadvantages of distance education, it is necessary to define the concept of this type of education. Distance learning is understood as a new organization of the educational process, which is based on the principle of independent learning, in which students are distant from the teacher in space and time. However, they have a constant opportunity to maintain a dialogue with him/her in the virtual space [3]. The specificity of distance education is its ability to meet the needs of the student, thanks to the mobile, virtual form of education, on the one hand, and on the other, the needs of society in the system of continuous education in connection with the current situation.

To ensure the continuity of education, like many educational institutions of our country, Tashkent University of Information Technologies named after Muhammad al-Khwarizmi and Tashkent state University of law in the second semester of the 2019-2020 academic year switched to distance learning in the form of an online platform. The universities created the online platform Moodle for online lessons. The teaching staff of both universities have transferred their

classes to this online platform. The teachers urgently and in a short time had to prepare audio and video materials on their subjects in the form of presentations, and audio-video lessons. The effectiveness or challenges of this type of distance learning and the problems faced by both students and teachers will be analyzed below.

The complete replacement of traditional education with distance education in 2020 is a necessary measure. In connection with the second wave of the global pandemic in Europe, as well as the continued spread of coronavirus infection in our country in the 2020-2021 academic years, higher educational institutions in the republic continue to teach students remotely.

The administration of both universities saw in the changed realities an opportunity to significantly revise the very process of teaching and managing it. In a pandemic, accelerated digitalization has become a test for teachers, educational institutions and the national education system. The educators could learn digital products and new infrastructure themselves. Since September of the new academic year, Tashkent University of Information Technologies and Tashkent state university of law have also completely switched to distance education for teaching students. Teachers conduct their classes as a conference on the Zoom platform.

In the course of the forced transition to distance education, previously not so obvious features of distance learning came to light. It became clear that this format requires new skills and competencies from teachers. Teaching a lesson remotely is not the same as teaching in a traditional way. The tasks of involvement, audience management, presentation of material, as well as knowledge control and assessment are solved in different ways. Distance education is, in principle, a different methodology.

Teachers with the knowledge of information technologies, as well as high involvement of students, are the determining factors for building a full-fledged environment for educating online. But, not all teachers immediately turned out to be ready to master new technologies, investing their time and efforts in this not always simple process. From the outbreak of the pandemic, educators were immediately tasked with implementing distance learning methods, often without sufficient guidance, training, or resources. It is known from various media that educators around the world were largely unprepared to ensure the continuity of learning and adapt to new teaching methods. Even with adequate infrastructure and capabilities, many teachers lack the most basic ICT skills, which mean they are likely to struggle with their own ongoing professional development to promote quality distance education.

#### **Disadvantages of distance education**

A sudden immersion in online learning revealed the advantages and disadvantages of this system. Due to the innovation of the online platform for distance education, not only teachers, but also students experience some difficulties in using it, especially first-year students, since they do not yet have basic information technology skills. From personal experience in distance learning, the authors would like to share with their observations in the form of an analysis of this type of education. In remote learning

- in most cases, students and teachers, face a number of common problems - differences in the availability of communication channels, lack of equipment and low quality of telecommunication services. Some students who do not have reliable Internet access and / or technology find it difficult to participate in digital learning, especially in remote regions of Uzbekistan;

- from the onset of the pandemic, teachers were immediately tasked with implementing distance learning modalities, often without sufficient guidance, training, or resources;

- the majority of teachers lack real practice and the ability to build online learning, organize and conduct videoconferences with students;

- the complexity of the organization of work for the development of oral speech skills when teaching a foreign language;

- due to insufficient distance learning experience, a lot of time has to be spent on the technical organization of an online lesson;

-the volume of the lesson material is less than on the traditional teaching method; - there is no guarantee of the students' self-fulfillment / solution of educational tasks;

- lack of direct communication with teachers. Many students find it much more convenient to ask questions right away during the course of the class, which is impossible when studying online.

Thus, online education will be ideal for a person with good motivation and selfdiscipline, as well as for those who do not need direct contact with the teacher and the group with which they study in the "here and now" format.

## Positives of learning online

Along with the disadvantages, of course, there are positive aspects of online education. Is online education effective? There is evidence that learning online can be more effective in a number of ways for the students who have access to the information technology. According to some studies on average, students get 30-65% more material when learning online than in a classroom, where they get only about10%. It is because the students have ability to learn quicker during online classes. E-learning requires 45-65% less time to learn the material than in a classic way of education.

In distance education:

- an individual learning pace is one of the main factors. Students can learn at their own pace, revisit video tutorials or presentations, go back and reread, skip or speed up concepts of their choice;

-students practice self-study, that is vital nowadays in the modern society;

-the possibilities of the Internet in the selection of bright, colorful demonstration material, the use of video and audio content by the teacher for online classes;

-practically raise the level of skills in the sphere of information technology;

- there is no need for students to spend money on teaching aids. All the necessary materials for education are available online within the course.

- in case of missing a lesson - you can revise the training material later;

- online education helps develop motivation and self-discipline.

-training online is more personalized. Students do not feel shy to ask questions personally in correspondence with their teachers. In the last academic semester, there were cases when students wrote their questions to their teachers of the Department of Foreign Languages like "What is the difference between to like and to be like, to have and to have got, Present Perfect and Past Simple?"

## Conclusion

All considered above, it should be noted that it is distance education that gives students access to various sources of information, increases the efficiency of selfstudy, gives completely new opportunities for creativity, acquisition and consolidation of various professional skills, and lets trainers to implement fundamentally new forms and methods of teaching using conceptual modeling phenomena and processes.

Development of distance learning in the national education system will continue and improve with the development of Internet technologies and the improvement of distance learning methods.

Thus, modern information and communication technologies open up twofold opportunities for their use in the higher education system. On the one hand, they allow to cover new categories of students, overcoming the existing temporal and spatial constraints, on the other hand, they provide new teaching aids, open up new horizons for teaching, learning and knowledge assessment, enhance research opportunities, and allow the introduction of new, more effective models of administration and management ... However, this model of education faces some difficulties, both subjective and objective. Overcoming these difficulties and the successful implementation of this training model and after the end of the pandemic associated with coronavirus infection means profound changes in the organizational structure of modern education in our republic.

On the basis of the formed and tested infrastructure and available technologies, universities today can move to the introduction of new services and approaches to support the educational process in a digital format. For example, co-lead projects or research in senior years through the use of a single platform. Or the introduction of elements of artificial intelligence to increase the efficiency of the educational process, the interest of students and the release of teachers from routine tasks in favor of more creative ones. Or the use of cloud platforms and solutions for data processing and, in general, the introduction of the most modern technologies in the educational process and activities in general.

Of course, the online format will not replace the traditional forms of learning and communication. But there is no point in giving up new opportunities. After the pandemic finishes, a blended learning model will develop in universities, combining face-to-face interaction between students and teachers with the use of the advantages of distance learning where it is necessary, in the most convenient and effective way.

There is a paradigm shift in the entire education system in Uzbekistan, and we can say with confidence that it will not be the same. Society is getting used to online learning, and the crisis is a catalyst that has accelerated the development of online education.

### **References:**

1. Karin Horn. Instructional Technology.

~ khorn@esc11.net.

2. Stéphan Vincent-Lancrin. How the crisis might transform higher education: some scenarios. OECD. Centre for Educational Research and Innovation. https://www.oecd.org/education/imhe/43325389.ppt

3. David Faulkner. Higher Education in the 21st Century. Oxford, August 2014. 4. Khashimova D., Shamsitdinova M., Salakhova E. Creation and Use of Teaching Electronic Multimedia Books when Teaching Languages to Learners and Students in the Republic of Uzbekistan. Journal of Advanced Research in Dynamical Control System, USA- 2019, P.1039-1045. <u>https://www.jardcs.org/</u>

5. Gozman L. Ya., Shestopal E.B. Distance learning on the threshold of the XXI century. Rostov- on Don .: Mysl, 1999. P.368.

6. Shakhmaev N.M. Technical means of distance learning. M.: Znaniy, 2000. P.276.

7. Shchennikov S. A.,. Teslinov A. G, Chernyavskaya A. G. and others. Fundamentals of a tutor's activities in the distance education system: specialized training course /. Moscow: Drofa, 2006. P.591.

8. Ibragimov I.M. Information technologies and means of distance learning: textbook. Manual for stududents), Moscow: Academy, 2005, P.336.

9.Evreinov E.V., Kaimin V.A. Informatics and distance education. M .: VAK, 1998.P.88.

10.Osipova L.B., Goreva O.M. Distance learning at the university: models and technologies // Modern problems of science and education. - 2014. - No. 5

<u>11. www.mehnat.uz.</u> New opportunities for distance learning during a pandemic.

12. <u>www.weforum.org</u>.. <u>The rise of online learning during the COVID-19</u> pandemic ..

13. <u>www.un.org</u>. Education during COVID-19 and beyond - the United Nations