DOI 10.18372/2786-5495.1.17307

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THE CONCEPT OF DEVELOPMENT AND CURRENT TOPICAL ASPECTS OF THE DISTANCE LEARNING SYSTEM IN AZERBAIJAN

Annotation. The present paper aims to review distance learning. There is noted that with the development of modern technologies, the channels for transmitting information and knowledge are also expanding. The rapid development of telecommunications creates ample opportunities for knowledge acquisition and greatly facilitates this process. In such conditions, distance education has a wider scope of application. Distance learning allows anyone, even in the most remote part of the world, regardless of income level, to take courses at the most prestigious universities. The article touches upon the current issues of distance education in Azerbaijan in modern times. Trying to answer this question: What current trends are observed in distance education and what forms of it are used in Azerbaijan? The author notes that distance learning, which began to be applied during the pandemic, has created a negative public opinion about education to some extent: «If remote, then poor quality». Currently the most serious problem is to change the opinion formed in society. Today, distance education should be perceived as inevitable step in terms of solving the crisis emanating from the pandemic. This is also a nonalternative approach from the standpoint of ensuring the sustainability of education. As a result, it is concluded that education definitely needs to change. This is primarily due to the development of new technologies, globalization and

digitalization. That is, education should be digitalized, distance education should be provided. The use of distance learning should not become a subject for discussion. We need to think about the quality of distance education.

Анотація. Ця стаття спрямована на огляд дистанційного навчання. Відзначається, що з розвитком сучасних технологій розширюються і канали передачі інформації та знань. Стрімкий розвиток телекомунікацій створює широкі можливості для отримання знань і значно полегшує цей процес. У дистаниійна освіта має сферу застосування. таких умовах ширшу Дистанційне навчання дозволяє будь-кому, навіть у найвіддаленішій частині світу, незалежно від рівня доходу, пройти курси в найпрестижніших університетах. У статті розглядаються актуальні питання дистанційної освіти в Азербайджані у сучасний час. Спробуємо відповісти на це запитання: які сучасні тенденції спостерігаються в дистанційній освіті та які її форми використовуються в Азербайджані? Автор зазначає, що дистанційне навчання, яке почали застосовувати під час пандемії, певною мірою сформувало негативну думку суспільства про освіту: «Якщо дистанційна, то неякісна». Зараз найсерйознішою проблемою є зміна сформованої у суспільстві думки. Сьогодні дистанційну освіту слід сприймати як неминучий крок у вирішенні кризи, спричиненої пандемією. Це теж безальтернативний підхід з позиції забезпечення сталості освіти. У результаті робиться висновок, що освіта однозначно потребує змін. У першу чергу це пов'язано з розвитком нових технологій, глобалізацією та цифровізацією. Тобто освіта має бути цифровізована, має бути забезпечена дистанційна освіта. Використання дистанційного навчання не повинно ставати предметом дискусії. Треба думати про якість дистанційної освіти.

Key words: educational, distance learning, distant teaching, e-learning, concept, development, Teaching TV, TV-lessons, Azerbaijan, digital technologies, challenges, opportunities

Ключові слова: освіта, дистанційне навчання, дистанційне навчання, електронне навчання, концепція, розробка, навчання ТБ, телеуроки, Азербайджан, цифрові технології, виклики, можливості

Introduction. In the modern world, information technology has pierced all spheres of human life, and the field of education is no exception. The use of Internet technologies and distance learning is not something new now. Today, distance learning allows you to look at the process of obtaining education from a different perspective. With the advent of the Internet, people have the opportunity to directly access various resources located on the network. The potential of such technologies is very high, which is why not a single area of human activity now functions without information technologies. The active use of such technologies in education has determined the place of distance learning.

Economic and social achievements at the end of the 21th century initiate the transition of global economy from old into a new virtual economy. Virtual economy is highly related to globalization and economy networking. Today it has become the fundamental economic resource. For this reason knowledge enriched workers are the most wanted input and output. Education is necessary to achieve and supplement new knowledge. Because of geographical distance and level of development, education, in classical sense, is not available to a large number of world's population.

There is unanimous opinion: education is definitely changing. «In 2017, 6,6 million students enrolled in distance learning. Following the global pandemic in 2020, that number skyrocketed to over 400 million students. Online learning from a distance has become a go-to method of education, opening up countless new opportunities and access to education that many didn't think possible prior to the forced shift brought on by the changes Covid-19 thrust onto the world» [1]. This is primarily due to the development of new technologies, globalization and digitalization. Education cannot remain analogue education as traditional. Education must be digitalized, distance education must be provided. The use of new

technologies in education, as in all areas, is inevitable. Today importance of the implementation of distance learning is not discussed. We are all basically thinking about providing quality distance education. It is also a non-alternative approach from the standpoint of ensuring the sustainability of education. Distance education meets the challenges of the times, does not require presence, saves time and effort, which traditional education cannot afford. That is, distance education fills the gaps of the traditional form of knowledge acquisition. Distance education is widespread throughout the world, especially in the higher education system, and is an integral part of modern education.

The purpose of the article. The present paper aims to review distance learning.

Research Results. Distance learning, also called distance education, e-learning, and online learning, form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate student-teacher and student-student communication. Distance learning traditionally has focused on nontraditional students, such as full-time workers, military personnel, and nonresidents or individuals in remote regions who are unable to attend classroom lectures. However, distance learning has become an established part of the educational world, with trends pointing to ongoing growth. In U.S. higher education alone, more than 5,6 million university students were enrolled in at least one online course in the autumn of 2009, up from 1,6 million in 2002 [2].

Characteristics- Essentials, Purpose of Distance Learning

Time and space no longer separate learners from their instructors. The emergence of distance-learning technologies, especially the Internet and networking technologies connect learners with their instructors. Instructional resources such as training courses, instructional job aids, reference materials, training guides, and lesson plans, as well as teachers, trainers, and other learners that were traditionally available for traditional classroom settings are now attainable via distance-learning technologies by anyone, anywhere, and anytime. As the growth of new information in

the digital age accelerates (Gagne, Wager, Golas, & Keller, 2005), the debate revolving around distance-learning essentials has become even more heated among the academic circles [3]. One side of the debate, represented by senior faculty, indicates that distance learning is inferior to traditional classroom learning because it lacks the necessary «face-to-face» interaction. The other side of the debate, representing current researchers and junior faculty, contends that distance learning is no better or no worse than traditional learning, given the fact that distance learning offers both advantages and disadvantages. The same thing is true about traditional classroom learning, which also offers benefits and disadvantages [3].

Regardless of the debate, distance learning is revolutionizing education and training, along with so many other aspects of our lives (Gagne, et al., 2005). Open any job ads for a faculty position and there must be a description requiring a potential faculty member to be able to use distance-learning technologies. Those faculty members who cannot use distance-learning technologies are truly at a disadvantage nowadays.

Distance education refers to instruction that occurs when there is a difference in time, location, or both. There are a variety of distance education delivery systems: correspondence, broadcast, teleconferencing, computers and digital technologies, and the Internet and World Wide Web. Distance education is defined as learning via telecommunications. The term telecommunications embraces a wide variety of media configurations, including radio, telephone, television, and the Internet. The Greek root word «tele» means «at a distance» or «far off». Heinich, Molenda, Russell, and Smaldino (2002, p. 268) define distance education as a form of education characterized by Physical separation of learners from the teacher, An organized instructional program, Technological media, and Two-way communication [3].

Succinctly defining distance learning can be challenging, because there are a number of different distance learning types and models to cover. Meanwhile, certain terms, such as «e-learning» and «online learning» are synonymous with distance learning in some contexts, but not in others. Nevertheless, all forms of distance

learning share some common traits, and the objectives are usually the same. Keep reading to learn more about distance learning and how it can be defined.

Regarding the definition of «distance education» and distance learning. To answer this question, it is necessary to define the content of the concept of «distance learning» and distinguish it from the concept of «distance education». Distance learning is the interaction of a teacher and a student at a distance, in which all components of the educational process are consistently implemented - goals, content, methods, organizational forms, teaching aids.

Education is a key category of pedagogical science, while education is a broader interdisciplinary category in terms of content [6].

Distance learning is transparent. The new situation of open access to educational information imposes increased requirements on the qualifications of a teacher. Previously, when children were taught full-time, the parent had to go through certain procedures and take permission from the director in order to be present at the lesson. Now we see how classes are held, where the strengths and weaknesses of teachers and students.

Distance education is a new and different form of education. This is not a fulltime or part-time study. If the teacher tells the camera what he told the audience in traditional education, it does not turn into distance learning. Therefore, it is wrong to compare distance learning with full-time.

Distance education has created great competition/ rivalry. Today, many universities, especially foreign ones, are ready to offer potential students distance education with a corresponding diploma.

Regarding common types of distance learning-though there are lots of learning (and teaching) options online, there are a few types that are well supported by existing systems and established pedagogies. Video conferencing is a common way for teachers to interact directly with students in live lessons. This could be a one-onone session or a class-like scenario in which multiple students connect to the teacher live. Synchronous learning is when all the students learn together at the same time (and often even place) but the instructor is at another location. It often features video or teleconferencing that connects teachers and learners digitally. Asynchronous learning is a less connected but also less constrained format. Instead of live online lessons, students are given learning tasks with deadlines. They then self-study to complete the assignments [7].

Open-schedule online courses add yet another layer of flexibility. It is a type of asynchronous course setup, except there aren't any deadlines either. This is ideal for learners with other demands on their time, such as professionals or stay-at-home parents. Fixed-time online courses are a type of synchronous course that requires online users to all visit a specific virtual location at a set time and place (e.g. a webinar). Unlike more rigid synchronous lessons, this does allow students from anywhere in the world to connect and interact online [8].

Computer-based distance education is a fixed-time, synchronous lesson on computers, usually a computer lab. This is most common in existing institutions that already have access to the necessary devices.

Hybrid learning is a specific type of blended learning where students are learning the same lesson in real-time (i.e. synchronous distance learning) but some of the students are physically present while others are learning remotely.

Distance learning is a way of learning remotely, the method of studying for students who are separated from teachers or assistants by physical distance. Distance education differs from the traditional one by the interaction of the subjects of the educational system in the virtual space through information and communication technologies. Distance learning is carried out by means of the Internet and web technologies.

Distance learning is often associated with the term E-learning. Definitions of E-learning are often classified into two groups:

a) Technical definitions with emphasis placed on technology (the «E» part of the name), e.g.

«E-learning is any form of learning, teaching and education that is supported by the use of computer technology, with emphasis on computer networks that are based on Internet technologies».

b) Pedagogical definitions with emphasis placed on education, that is, teaching and learning («learning» part of the name), e.g. [9].

Distance learning has greatly improved in the past few years, mainly through the development of computer networks, particularly the development of Internet hypermedia services WWW. Nowadays, the term distance learning is very often replaced with the term On-line learning, which emphasises a special form of E-learning or E-education

Regarding advantages of distance learning, one of the greatest advantages of distance learning is that it allows continuous learning and professional development independently decide on time, place and pace of learning. Furthermore, students have at their disposal a large number of subjects and different study programmes.

There is several models of distance learning, in particular:

- 1. Consulting model;
- 2. Case technology model;
- 3. Case-studies ;

4. Correspondence model;

5. Radio-television model of distant education [10].

Current topical issues of the development of distance learning in Azerbaijan

Regarding some current topical issues of the development of distance learning generally, we would like to note that it includes namely:

1. The problem of identifying remote learners, training of distance education specialists, the quality of didactic material, elimination of the disparity in internet access across the country in all regions.

2. A marketing and information-analytical system of the distance education system should be created.

3. Theoretical, scientific and psychological foundations and methodology should be developed.

4. It is necessary to create a system of courses and electronic libraries.

5. Criteria, means and systems of quality control should be developed.

6. The material and technical base must be created; communication systems should be improved for its implementation [11].

Regarding distance learning in Azerbaijan, there are successes and also problems. According to the stat official resolution, «Law of the Republic of Azerbaijan «On Education» there are four forms of education in Azerbaijan: fulltime, part-time, distance-remote and external. The Law on Education in Azerbaijan, which has finally entered into force, allows educational institutions to use modern distance learning programs. The law provides state guarantees to provide citizens with opportunities to receive education throughout their lives, regardless of their place of residence and location [12].

Significant work has been done in Azerbaijan to develop the national system of distance education and learning in recent years.

General methodological recommendations have been developed for the creation of educational materials in electronic form and for the development of distance learning technologies.

As it is known, the COVID-19 pandemic has created a completely different situation around the world, dictating a revision of socio-economic priorities. The pandemic has also had its biggest impact on education systems around the world. In the initial stage, it was the education system of the countries that was subjected to the greatest test and failed to respond adequately.

In order to keep students up to speed in education, the Ministry of Education launched tele-lessons on March 11 and started using the «Virtual School» platform on April 2.12 The Ministry of Education has launched the «Lesson Time» program, as well as the «Virtual School» project for students and teachers. «Culture» TV channel has started broadcasting TV13 programs all over the country. The best specialists in the field of education in the country were invited to take part in these tele lessons, which were prepared in mini-studios specially created by the Ministry of Education. The lessons were broadcasted live or pre-recorded. Tele-lessons were presented by experienced teachers. Schedules of tele-lessons were announced in advance in television, and in some schools, WhatsApp groups have been set up by class teachers by including the phone numbers of the students or their parents. Information on lesson time-tables and telelessons was sent to these groups.

«Azerbaijan evaluated several different solutions for remote learning to keep education ongoing. As the best solution available, the Ministry of Education advised all higher education institutions to use Teams for remote learning and provided additional support. To make the transition to distance learning more accessible, Microsoft team in Azerbaijan, together with Bestcomp Group, Edumedia, and Innovative Technologies in Education, helped schools, educators, students, and their families as they navigate this new way of learning. According to the Ministry, Microsoft Teams for Education, in comparison with competitive solutions, provides a holistic environment that allows content distribution, collaboration, live meetings, and assessments» [13].

From March 3, 2020, the teaching and training process was stopped in all educational institutions. In order to ensure the continuity of education, in Azerbaijan implemented. Television model of distant education. Teaching TV and TV-lessons were first created. At first, TV lessons were chosen because of the difficulties in providing uninterrupted and fast internet connection to students in remote regions.

Today, more than a million K12 students and 100.000 teachers have already been registered and actively using the platform. This project has been widely covered by local online and TV media to support educators who have created thousands of videos with the help of Teams for Education. Now, it is possible to evaluate the level of knowledge by using PowerBI tracking activities by each region and every school in Azerbaijan. At the same time, Virtual School became the largest online platform for cooperation and collaboration countrywide. It is an excellent example of how one Ministry found the right strategy, resources, and technology to quickly create online classrooms that help students, teachers, and faculty find new ways to connect and learn.

Even more, 100.000+ users from 30 out of 50 universities and all vocational education institutions use Teams and decided to continue with Microsoft Teams as a learning platform.

Ministry of Education continues running the Virtual School project as an always-on platform, helping students stay engaged, and learning stays on track. At the same time, the Ministry uses Microsoft Teams for internal daily meetings.

Capabilities of Microsoft Teams, Forms, Minecraft Education Edition, and Stream will be used for centralized monitoring, content distribution, and flexible content amendments according to learning results. It is interesting that Azerbaijan's experience of tele-lessons was later used by Georgia, Turkey, Ukraine, Great Britain and other countries [14].

As the next step, the largest national online platform of the country was launched for the «Virtual school» project. It should be specially emphasized that the distance education platforms, electronic portals and training applications applied in Azerbaijan during the pandemic were included in the list presented on the official website of UNESCO [14].

Despite all the negative aspects, the introduction of distance learning for a year has noticeably developed the level of skills in using technology among students and schoolchildren.

In 2021 year The Cabinet of Ministers of Azerbaijan has decided to cancel distance learning in the country and switch to full-time education.

Distance education is a new and different form of education. This is not a fulltime or part-time study. If the teacher tells the camera what he told the audience in traditional education, it does not turn into distance learning. Therefore, it is wrong to compare distance learning with full-time.

Currently, the quality of distance education is the one of the number one issues. It should be noted that distance learning, which began to be used during the pandemic, has created a negative public opinion about education. Now the most serious problem is to change the opinion formed in society «If its distant -remote, then poor quality».

It is true, that distance education programs that meet world standards are implemented in Azerbaijani universities. At the same time amount of the Azerbaijan university that conducts the educational process with the use of new technologies in all academic disciplines-remains little.

However, there are also problems. In Azerbaijan, work on the formation of a legislative framework in the field of distance learning has not been fully completed;

With such training, the work of teachers did not decrease, on the contrary, it increased significantly. The psychological tension of teachers, as well as students, has increased. The formation of teachers' and students' skills within a short time to use new technological tools and means has become an additional source of tension.

The supposed cheapness of this form of education was also an unreasonable approach. The transition to distance learning meant that traditional education, faced with a crisis, could not fulfill its function.

For example, although the Law on Education adopted in 2009 provides for distance education as one of the forms of obtaining higher education, diplomas of persons who have received education abroad are still not recognized, since mechanisms for obtaining distance education have not been developed in Azerbaijan.

One more aspect should be noted. The official recognition in our country of a university of some country does not at all mean recognition of the form of its education. Currently, only diplomas of those who received education abroad in full-time or part-time form are recognized.

According to the Minister of Education, Azerbaijan is working on the formation of an appropriate legislative framework: «Distance education is a form of education in which, in order to recognize a diploma, acquired knowledge and skills, the

corresponding program must go through a quality assurance process without fail. Probably, in the near future, our education system will move in this direction. But we do not want distance learning turned into the distribution of diplomas. We intend to take steps within the framework of generally accepted world standards».

Also another topical aspect is conducting trainings for its faculty lectures and pedagogical staff on distance learning with the involvement of foreign experts.

Besides such aspects, as: what levels of education will be covered by distance learning, in what specialties it is possible, according to what standards the manuals will be prepared and in what form the exams will be held. In addition, the main points are the availability of an appropriate material and technical base and human resources.

It is necessary to emphasize one issue that, one of the urgent problems in the area of distant learning is international cooperation and exchange of experience in the development of distance learning. Such as, the problem of management, competent management of the process of distance learning and education, including its pedagogical, legal, economic aspects, can be obtained collectively, by the combined efforts of different specialists. The trend of cross-country and interuniversity integration to coordinate the goals of distance education is one of the brightest milestones in the modernization of education. The tasks of innovative development of education, to active international cooperation in this area.

It is in this aspect that these conferences organized by our Ukrainian colleagues are of great importance.

Conclusions. Currently, there is an urgent problem of organizing non-contact learning in society. The causes of this problem are far beyond the education system, but it is education that has to deal with them. In this regard, a difficult moment arises in assessing the new remote style of work: the use of new forms and methods of work, their pros and cons, the results of work and their adjustment. The lack of experience of the teaching community in working remotely and the lack of

experimental data significantly affect the conduct of this assessment. As the analysis shows, the same evaluated parameter carries a certain duality, since it is rather difficult to unambiguously attribute it to the advantages or disadvantages of distance learning. In particular, speaking about such a positive aspect of distance learning as flexibility (the ability to autonomously adjust the pace, sequence and control over the supply of material), one can notice that it also carries such hidden negative aspects as slower progress in knowledge, the impossibility of quick correction of incorrectly learned material, lack of full control over the performance of work by students, etc. As the main conclusion from the analysis, it should be noted that any of the characteristics of distance learning can have both pluses and minuses, and the task of the organizer of distance work is to take these aspects into account when choosing the forms and content of educational material, monitoring its assimilation and correcting the learning process.

Thus, we can conclude that distance learning is today an indivisible part of the educational system, along with such forms of education as full-time or part-time. In Azerbaijan, the distance education system is still under development, there is still no clear legal framework, but this does not prevent universities from providing distance learning services. In other developed countries, such as the United States or Japan, distance learning began to develop earlier and is much more productive than in Azerbaijan, however, in these countries, receiving distance learning is accompanied by a number of conditions and restrictions. Summing up, it is worth noting that distance learning, as one of the modern types of education, has every right to exist in the education system along with traditional forms of education.

References

1. What is Distance Learning? The Complete Guide. URL: https://www.techsmith.com/blog/distance-learning/

2. Distance Learning. URL: https://www.britannica.com/topic/distance-learning

3. Gagne R.M., Wager W.W., Golas K.C., Keller J.M., Russell J.D. Principles of Instructional Design. Performance Improvement. *Advantages and Disadvantages*

of Distance Learning. 2005. 44. P. 44-46. URL: <u>https://eztalks.com/elearning/advantages-and-disadvantages-of-distance-</u> <u>learning.html</u>

4. Heinich R., Molenda M., Russell J.D., Smaldino S.E. (2001). Instructional media and technologies for learning (7th ed.), Englewood Cliffs, NJ: Prentice Hall.

5. Distance Learning: Advantages and Disadvantages. URL: https://studycorgi.com/distance-learning-advantages-and-disadvantages/

6. De Paepe L., Zhu C., Depryck K. (2018). Online Dutch L2 learning in adult education: Educators' and providers' viewpoints on needs, advantages and disadvantages. Open Learning, 33(1), 18–33.

7. Caroline Howard (Touro International University, USA), Richard Discenza (University of Colorado, USA), and Murray Turoff (New Jersey Institute of Technology, USA) Distance Learning in 21st Century Education. 2009. 2612 p. P. 404.

8. Watts L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. Quarterly Review of Distance Education, 17(1), P. 23–32.

9. Mahlangu V. P. (2018). The good, the bad, and the ugly of distance learning in higher education. In M. Sinecen (Ed.), Trends in E-learning.

10. «Təhsil haqqında» Azərbaycan Respublikasının Qanunu. URL: https://edu.gov.az/az/esas-senedler/tehsil-haqqinda-azerbaycan-respublikasinin-qanunu

11. Azerbaijan: How one Ministry found the right strategy, resources, and technology to quickly create online classrooms / July 9, 2020 | CEE Multi-Country News Center. URL: <u>https://news.microsoft.com/en-cee/2020/07/09/azerbaijan-how-one-ministry-found-the-right-strategy-resources-and-technology-to-quickly-create-online-classrooms/</u>

12. Gürcüstan isə Azərbaycandan 1 ay sonra teledərslərə başladı. URL: https://backup.qafqazinfo.az/news/detail/bohran-dovrunde-tehsilin-davamliligi-282587

13. Education:from school closure to recovery.URL:https://www.unesco.org/en/covid-19/education-response

14. Education in Azerbaijan during Coronavirus (COVID19) pandemic. URL: <u>https://www.eap-</u>

csf.az/Uploads/66cec7a57ea6460dbbc894c8db01b9e5432022916671.pdf