STAGES OF FORMATION OF BASIC CONCEPTS
OF DISTANCE LEARNING

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Short introduction. The article analyzes the historical stages of formation of basic concepts of distance learning (correspondence learning, distance learning). Theoretical aspects of the development of distance education in Ukraine are considered. Based on the analysis of scientific sources, the interpretation of key concepts of distance education and distance learning is systematized. Emphasis is placed on the fact that the modern understanding of the concepts and terms of distance learning is based on its interpretation as activities using Internet technologies and resources. A comparison of distance education and distance learning, related concepts of open education and blended learning is made.

Keywords: distance learning; distance education; e-education; blended learning, educational reforms; innovative education; educational programs; national education; establishment of higher education; information-and-communication technologies.

Problem Distance learning in the modern mass sense has begun to take shape relatively recently. March 2020 was marked by the announcement of quarantine in Ukraine due to the COVID-19 pandemic. Therefore, taking into account the advanced pedagogical experience accumulated by various educational establishments in the world on the application of the latest digital technologies in education, the domestic education system has embarked on the path of organizing and conducting distance education.

Distance learning today is one of the key areas of renewal of all parts of the educational system of Ukraine. At present, there is a scientific-and-theoretical understanding of distance learning, new scientific terminology is included in the scientific circulation, appropriate methodological support is being developed, and experimental testing of new distance educational technologies is underway. It is significant that the definition of «distance learning» is characterized by pluralism of definitions, which indicates a wide range of approaches to its interpretation.

Among domestic and foreign scientific research on various aspects of distance learning, the number of which has increased significantly in recent years, not only the concept of «distance learning», but also «distance education», «e-learning», «distance learning» and other related concepts, which are partly used ambiguously and interpreted differently.

The legal basis for distance learning in Ukraine is provided by a number of state documents:

− Law of Ukraine «On Higher Education» of 01.07.2014, in which among the forms of education in higher educational establishments distance education is singled out [1];

− The concept of development of distance education in Ukraine, approved by the Resolution of the Ministry of Education and Science of Ukraine of 20.12.2000, according to which distance education is considered a full-fledged form of learning, implemented using distance learning technologies [2];

− Order of the Ministry of Education and Science of Ukraine «On Approval of the Regulations on Distance Learning» from 25.04.2013 № 466 (as amended), which defines the meaning of «distance learning» and «distance form of learning» [3].

However, the use of key concepts and terms of distance learning in modern scientific research is partly debatable.

The problem of semantic content of the concept of «distance learning» and related terms is taken care of by domestic scientists (V.Yu. Bykov, V.M. Kukharenko, V.V. Bondarenko, Ye.S. Polat, etc.) and foreign ones (J. Gubagar, M. R. Simonson, D. Painter, R. Schank, A. Rossett, R. Vaughan Frazze, and others). The works of these researchers analyze the genesis of the concept

of distance learning; UNESCO's educational programs «Education for All», «Lifelong Learning», «Education without Borders» are studied, which recognize the development of distance education as one of the key areas of modernization of the entire world educational system; introduce new related terms.

The purpose of the study is to systematize the interpretation of key concepts of distance education and distance learning based on the analysis of scientific sources on the theoretical problems of distance learning and pedagogical experience.

Research novelty Our own experience of using distance learning in the Medical Academy gives grounds to believe the importance of its application in the process of forming of the future graduate's professional competence, as well as modifying approaches to the preparation and conduct of theoretical and practical classes.

Presentation of the main material. As you know, the historical beginning of distance learning, most scientists find in the middle of the 19th century. The Berlin Institute for the Study of Foreign Languages is considered to be the first establishment to use distance learning. Training in this establishment from the mid 1850s took place by means of correspondence, which later became known as corresponding learning. Similarly, regular mail as the first stable regular public communication system was used to train individuals at the University of London (since 1858), whose applicants were allowed to take exams for academic degrees, regardless of the form of knowledge acquisition (full-time, correspondence or self-study) [4; 5].

In America and Canada, the development of corresponding learning as the first form of distance education has enabled the progress of rail transport. The first American correspondence programs appeared in the 1970s. In the last decades of the 19th - early 20th century, some higher educational estblishments, including the University of London, the Scottish University of St. Andrew, the Royal University of Canada, the University of Chicago (USA), the University of Queensland (Australia), etc., began distance learning. It was at that time, according to V. Vyshnivsky and his co-authors, a new term came into circulation: distant education («distance learning») [5]. The development of initial forms of distance learning has been made possible by scientific-and-technological progress, including the widespread introduction of postal, telegraph, telephone, radio and television, which have been used by participants in the learning process. Thus, at this stage, distance learning was equated to extra-mural learning, which existed alongside with traditional full-time and was interpreted as learning at distance, in addition, at this time it gained legal recognition, as students' qualifications at the university were confirmed by official documents on education [5].

In Ukraine, distance learning in many respects is still perceived as an innovation, although in 2000 the Concept for the Development of Distance Learning in Ukraine was approved, which substantiates the feasibility, purpose, main objectives and expected consequences of creating and implementing such a system. Another document was approved in 2013 - the Regulation on Distance Learning. Here the scientific-and-methodical providing and features of the organization of educational process with use of technologies of distance learning are detailed. A person's right to receive education in various forms, including distant one, is provided by the Law of Ukraine «On Education» (2019) [7]. In May 2020, Guidelines for the Organization of distance learning in Ukraine appeared. The recommendations were approved for use in the reports of educational establishments on June 18, 2020 [8].

I.V. Robert in his monograph «Theory and Methods of Informatization of Education"» interprets distance learning (distributed learning) through the prism of the process of knowledge transfer, skills development in the context of interactive interaction between student and teacher, and between them (subjects) and an interactive source of information resources, which reflects all the elements characteristic of the educational process (purpose, goals, organizational forms, content, teaching aids, methods), implemented in the use of information-and-communication technologies [9].

A similar interpretation of this definition was proposed by Ye. S. Polat: «distance learning is a systematic organization of learning, built on the interaction of teacher and student, students at a distance, which reflects all the inherent elements of the educational process (organizational forms, goals, learning tools, content) unique techniques of information-and-communication technologies and the Internet technologies» [10, p. 23].

Scientist A.V. Khutorsky interprets distance learning as «learning in which the subjects are at a distance, implementing the educational process with the help of telecommunications» [11, p. 15].

Thus, based on a systematic analysis of the above mentioned interpretations, we can state that most researchers distinguish and scientifically argue in the definition of «distance learning» such its components, as:

‒ learning in parallel (synchronous) and non-simultaneous (asynchronous) form;

‒ elements of the educational process are: organizational forms, content, goals, teaching aids, methods);

‒ subjects of study;

‒ means of information-and-communication technologies.

Given the challenges of modernity and experience gained in recent years, distance learning has come to be thought of as «an individualized process of acquiring knowledge, skills, abilities and ways of the individual's cognitive activities, carried out mostly through mediocre extraterritorial (remote participants) interaction of subjects of the educational process in a special environment, which is based on the latest information-and-communication and psychological-and-pedagogical technologies» [12].

Characterizing distance learning, V.Yu. Bykov considers it appropriate to distinguish the following varieties:

‒ distance learning – a special form of institutionalization and implementation of the educational process, in which the subjects of learning (its participants) implement educational interaction in the principle way and mostly extraterritorially;

‒ traditional distance learning – a type of distance learning in which the interaction between participants and initiators of the learning process takes place in time asynchronously, while actively using the transport system of supply of educational volume and other information objects of the telephone, telegraph or postal system;

‒ e-distance learning – a type of distance learning, which involves mainly individualized interaction between organizers and participants of the learning process both synchronously in time and asynchronously, in the principle way and mainly using electronic transport systems for delivery of educational material and other information objects, computer networks Internet / Intranet, ICT [13].

Taking into account the above mentioned and the experience of organizing educational activities gained from COVID-19, distance education can be positioned as «the latest type of education, in which students work independently at home, and their communication with other students and teachers is carried out mainly through videoconferencing, electronic forums, e-mail and through other possibilities of network communication» [14].

It should be noted that in the scientific-and-pedagogical literature, the terms «distance learning» and «distance education» are partly used as synonyms. However, their content differs significantly as well as general pedagogical concepts such as «learning» and «education». It is known that in pedagogical science since the time of J. Pestalozzi learning is considered through the implementation of education, which, in its turn, becomes the result, the ultimate goal of learning. Therefore, the concept of «distance education» is broader than «distance learning», which does not exclude the possibility of using these concepts as synonymous, if their semantics do not play a key role.

Analyzing the phenomenon of distance education, we should also dwell on the concept of «open education», which is used in many scientific publications in post-Soviet countries in connection with the development of distance learning.

In domestic science (V. Bykov, M. Leshchenko, A. Yatsyshyn, etc.) the interpretation of the concept of open education is based on the definition declared by the National Institute for Strategic Studies as «application in the educational process and educational management at all levels of the latest information-and-communication technologies and innovative methods of work based on these technologies can play a significant positive role in reforming various areas of educational activities – from effective monitoring to the creation of integrated systems for access to educational resources and exchange of best teaching practices and teaching materials» [15]. In the proposed description, the main emphasis is on the use of information technologies, also inherent in distance education; the main factor of openness of modern education is its manufacturability, the use of network digital technologies, which generally provides intensification, continuity and individualization of learning.

Foreign researchers, including Toru Iiyoshi and M.S. Vijay Kumar, analyzing the state of development and leading means of open education today, draw attention to the different goals and objectives of different types of education: if distance learning develops in the direction of growing the level of access to education for people who earlier for various reasons were not able to get it, the tools of open education are primarily aimed at improving the quality of education, which does not preclude ensuring greater accessibility [16].

Thus, open education, in contrast to distance education, is aimed primarily at finding new methods and techniques of teaching, updating technologies for training and organization of the educational process, as usually new technologies are important only in the context of their creative application in the education system.

Another widely used concept today is e-education. The semantic content of this concept illustrates the organizational capabilities of the educational system, the educational process within which is mainly supported by e-distance learning technologies, and the organization of the educational process ensures the implementation of the principles of open education [17].

Scientists point out that e-education is implemented by a set of modern teaching aids – e-learning resources, the main types and functional classification of which in Ukraine are identified in the Regulation on E-Learning Resources [17]. Electronic educational resources are educational, scientific, informational, reference materials and tools developed in electronic form and presented on media of any type or placed in computer networks, which are reproduced by electronic digital technical means and necessary for the effective organization of upbringing-and-educational process in the part concerning its filling with high-quality educational-and-methodical materials. These include: electronic documents, publications, didactic demonstration materials, dictionaries, textbooks, distance learning courses, etc.

In his turn, M. Fedorchuk, analyzing the essence and state of implementation of e-education in Ukraine, identifies such its components, as: distance education, electronic libraries, audio-, video lectures, multimedia teaching aids [18]. Therefore, according to the scientist, the concept of distance education is much narrower than e-education.

It should be noted that, in general, most scholars rightly distinguish between the concepts of distance and e-education as significantly different pedagogical structures. They believe that as a result of the rapid development and improvement of communication tools, e-learning has now become more important than distance learning. E-education is much less focused on the form of lecture learning and much more – on the acquisition of specific knowledge from other sources, in addition, it is better adapted to different levels of learning.

E-learning as a way to obtain e-education – according to UNESCO – is learning through online tools and multimedia tools. According to M. Rosenberg, e-learning involves primarily the use of Internet technologies to ensure the effectiveness of knowledge acquisition and is based on the following principles: work is carried out over the network; delivery of educational content to the end user is carried out using a computer using standard Internet technologies [19]. In part, e-learning is synonymous with web-learning and online-learning.

The spread of e-learning has led to a new direction – blended learning. Mixed learning (hybrid, integrative, blended learning, technology-mediated instruction, web-enhanced instruction, mixed-mode instruction) is a form of education according to which a student learns part of the material through distance learning, and the rest of the material is studied in person in the audience.

«Blended learning» is a relatively new concept in modern education. The term blended learning first appeared in a newsletter in 1999, when an online learning education company changed its name to EPIC and announced that it would use the blended learning method [20].

Blended (or hybrid) learning, according to V. Kukharenko, is one of the most popular technologies today, because it allows one to take advantage of the flexibility and convenience of distance learning and the benefits of traditional class [21], which provides its flexibility and significant adaptability to educational conditions.

Thus, blended learning can be defined as a hybrid species that combines the latest technologies with traditional forms of learning.

Conclusions, prospects for further research, proposals. Analysis of scientific research of domestic and foreign researchers of various aspects of distance education proves the versatility and ambiguity of this pedagogical phenomenon, the conceptual apparatus of which is not yet fully standardized. The rapid development of computer technics and technologies stimulates the emergence of new types of distance learning, new forms and methods of educational activities in the distance education system.

Summing up the review of the main definitions, we note the following:

1. Basic among all the analyzed concepts is the concept of distance education, which is much broader than distance learning, which is the result, the ultimate goal of learning. However, the possibility of using these concepts as synonymous in some semantic representations is not excluded.

2. The essence of modern distance learning in higher educational establishments is most fully reproduced by the category of e-distance learning, which is provided by the use of Internet resources, multimedia teaching aids and other electronic educational resources.

3. The development of distance education is associated primarily with the introduction of blended (hybrid) learning, as well as its organic entry into the system of open education.

4. We see prospects for further research in the introduction of e-distance learning in the study of disciplines of various educational fields of higher education, in particular in education, as well as in the search for forms and methods of distance learning specific to this field.

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ЭТАПЫ ФОРМИРОВАНИЯ БАЗОВЫХ ПОНЯТИЙ ДИСТАНЦИОННОГО ОБУЧЕНИЯ

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Аннотация

В статье проанализированы исторические этапы формирования базовых понятий дистанционного обучения (корреспондентское обучение, обучение на расстоянии). Рассмотрены теоретические аспекты развития дистанционного образования в Украине. На основании анализа научных источников систематизированы толкования ключевых понятий дистанционного образования и дистанционного обучения. Акцентировано внимание на том, что современное понимание понятий и терминов дистанционного обучения основывается на его толковании как деятельности с использованием интернет-технологий и ресурсов. Проведено сравнение понятий дистанционного образования (distance education) и дистанционного обучения (distance learning), а также смежных понятий «открытое образование» и «смешанное обучение».

Ключевые слова: дистанционное обучение; дистанционное образование; электронное образование; смешанное обучение, образовательные реформы; инновационное образование; образовательные программы; национальное образование; учреждение высшего образования; информационно-коммуникационные технологии.

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