

VI International Forum on Teacher Education

Pedagogical Possibilities of Distance Learning in the Educational Process of the School

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Abstract

Modern education is increasingly frequently turning to the possibilities of distance ways of transferring knowledge. The reasons for this are sufficient, as distance education has a number of advantages that are not offered in the traditional form of education. In particular, it refers to the lack of direct contact between the object and subject of education, which is particularly important for practicing remote interaction with children who are gifted and have special educational needs or for children associated with learning objects with health limitations. In this connection, this article is aimed at disclosing distance learning issues in the educational process of the school. The leading method in the problem study was the method of deconstruction, which helped to define various interpretations of the concept of distance education in Russian and foreign sources. The article reveals the problems, forms and types of distance education, as well as models of distance education used in the educational process of the school. The issue of pedagogical possibilities of distance education, reflected in the law "On Education in the Russian Federation" (2012), is studied and disclosed in the research. The materials presented in the article allow using them for preparing school teachers to distance learning, which determines its practical importance.

Keywords: distance learning, school educational process, educational activities, distance learning model, pedagogical opportunities of distance learning, e-learning.

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Published by Kazan federal university and peer-reviewed under responsibility of IFTE-2020 (VI International Forum on Teacher Education)

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Introduction

With the increasing demands on the availability and quality of education imposed by society and the state on the education system, schools found themselves in a difficult situation. Transition to new generation federal state educational standards, final assessment in the form of the Unified State Examination and Basic State Examination, teaching of a second foreign language, introduction of the final essay, creation of an accessible environment, mandatory final assessment in several subjects caused the need of changing the traditional educational process in education schools. In a number of cases the distance form of working with students helps to solve difficult tasks of modern education.

However, in general the situation with school education requires effective "road maps" that would allow teachers to keep up with the times and meet the requirements of modern general education of schoolchildren. The actual tendency in education implies the active use of electronic means and communication technologies in the course of training. Thus educational platform "Dnevnik.ru" became widespread. It allows not only to keep records of students' progress, but also to conduct interactive classes, to interact remotely with students and their parents, to give tasks to students and to check them online, which ensures the sustainability of the learning process when they are unable to attend school, for example during quarantine or necessary absence of the child from classes for a number of reasons.

This state of things became possible due the new version of the current law "On Education in the Russian Federation" (2012) that includes provisions concerning the permission to use distance technologies in school education. The purpose of these provisions is to ensure the accessibility of educational programs and their differentiation by the level of complexity.

The idea of distance learning has been recognized by the general public due to the convenience of this educational technology, associated with the free choice of lesson time, the lack of strict regulation of lesson duration, the possibility of active personal participation in education. Today, distance technologies are especially in demand for acquiring additional skills through participation in trainings, seminars, for the self-realization of schoolchildren during participation in online Olympiads and competitions, for independent study of missed material or the whole discipline, for using the training base in preparation for the final test of knowledge.

As part of the study hereunder, we have analyzed the publications relating to distance education of such authors as Andreyev (1999), Bepalko (1989), Moore (2006), Polat et al. (2008). All of them characterized the distance form of learning as the one having a number of distinctive features, including the absence of direct face-to-face contact between the object and subject of education, having the possibility of interaction

between the parties with a delay in time, actively using information technologies in the process of learning, possessing high technological efficiency and interactivity of teaching means, having specific didactics, and preserving traditional components of the educational process. At the same time, the researchers emphasized the implementation of distance interaction between a student and a teacher through the Internet, PCs, smart phones, and various educational platforms working in digital format, but at the same time allowing meeting the educational needs of the persons involved.

In addition, distance learning may include not only two active participants (a teacher and a student), but more (a teacher and several students, a teacher and a class, several teachers and one class, etc.) united by the same learning goals and objectives.

Despite the obvious advantages of such a form of education as distance learning, the regulations for its implementation have not been sufficiently developed so far, but it is constantly being worked on due to the perspective of modern school education.

Thus, there is a need for a more detailed study of the educational process of a modern school and the search for opportunities to organize distance learning for students at school, contributing to the achievement of high cognitive results by students, and therefore the study of this problem is relevant.

Purpose and objectives of the study

Based on the foregoing, the aim of the study is to identify and evaluate the pedagogical possibilities of distance learning for students in the educational process of the school.

Literature review

As distance learning technology has started to be implemented in general education institutions relatively recently, but very rapidly, it has aroused a strong interest among modern teachers and researchers. Thus among the foreign researchers involved into the study of distance education issues are Keegan (1993), Moore (2006), Holmberg (1994); among Russian scientists it is worth mentioning Andreyev and Soldatkin (1999), Akhayan (2000), and others that left a trace in the study of the implementation of distance technologies in the interaction between a teacher and a student; the analysis of the peculiarities of the application of distance education methods in school teaching practice was carried out by Polat, Bukharkina and Moiseyeva (2004), Snegurova (2007) and Valushina (2012).

In most cases, the works of these scientists contain research on various aspects of the modern education phenomenon, such as distance learning technologies. Komarov (2014), Tikhomirova (2013), made the

application of distance learning in relation to students with limited health opportunities a subject of their study. Zaichenko (2003) studied the connection between the distance form of learning and the level of cognitive activity of schoolchildren. Sarafanov and Sukovaty (2006) researched the interconnection of interactive and distance technologies in modern general education system.

Methodology

This study, like any other, could not do without applying basic scientific approaches to solving problems. Thus, we took systematic, personal-oriented approach as the basic methodological research approaches. The first of these approaches, theoreticalized by such prominent scientists as Babansky (1981), Bepalko (1984), Kuzmina (1970), allowed us to analyze the phenomenon of distance education in modern school practice as a complex object with internal interdependent links, that is, as a system. The second, person-centered approach was used by us following Verbitsky and Larionova (2009) and Yakimanskaya (1996) in order to determine the degree of orientation of distance learning on the personality of each student, that is, on his individual cognitive and physical abilities and capabilities. The leading method in the study of this problem was the deconstruction method, which helped to determine different interpretations of the concept of distance education in domestic and foreign sources.

Results

Due to the relatively recent introduction of remote technologies into the practice of school everyday life, the terminological basis for this phenomenon is poorly developed. Most researchers agree that distance learning is one of the ways to acquire knowledge (Polat et al., 2008) in the form of process (Andreyev, 1999) or pedagogical technology (Komarov, 2014). The following is the most appropriate definition based on the UNESCO analysis report *Distance Education for the Information Society: Policies, Pedagogy and Professional Development* (2000): "Distance learning is a form of training where a teacher and students are physically separated in time or space, mediated by the application of information technologies used to overcome this distance while maintaining indicators of quality of learning" (cited in Gayevskaya, p. 4, 2007).

Polat, Bukharkina and Moiseyeva (2004) give the following definition to the concept under study: "Distance learning is a form of education in which interaction between teacher and students is carried out at a distance, reflects all the components inherent in the learning process (goals, content, methods, organizational forms, means of learning) and is implemented by specific means of Internet technologies or other means that provide interactivity" (p. 17). According to this definition, remote learning can be called a variation of the traditional educational process.

The U.S. Distance Learning Association (USDLA) believes that distance learning is a learning process that has a geographically separated teacher and student rely on electronic means or printed materials in order to make learning happen.

The studied law On Education in the Russian Federation (2012) also contains an approved definition of distance education, according to which the specificity of distance education is the need to use a PC, the Internet, and various educational materials on electronic media in the educational process. To define this term "e-learning" and "distance learning technologies" are used in the text of the law. E-learning refers to "information technology, technical means, information and telecommunication networks through which information is transmitted over communication lines and interaction between students and teachers is ensured. Distance education technologies are called educational technologies implemented mainly with the use of information and telecommunication networks with the mediated (remote) interaction of students and teachers" (p. 24).

Both terms reflect the specific content of the analyzed term - the use of network channels of the Internet for educational purposes, within the boundlessness of which the cooperation between a teacher and a student is realized; the final result of such interaction should be the transfer of knowledge to a student.

In our study, distance education should be seen as a type of educational activity in relation to the school environment. The educational activity itself should be understood as teachers' work to achieve learning goals through consistent interaction with students.

In accordance with this, the concept of distance education takes on the meaning of the activity of mastering the software material offered for studying the curriculum, which is organically included into the school environment. The analysis of pedagogical potential of distance education allows us to speak about its effectiveness in the conditions of a general education school.

Polat, Bukharkina and Moiseyeva (2004) in their works noted that distance learning can be implemented in different ways according to available models recommended for school application. Most of them have been analyzed by pedagogical researchers to determine the conditions for their effectiveness and applicability. For example, in the USA there is a whole Institute of Distance Education (IDE), whose activities are related to studying the specifics of different models of distance education, such as "Distributed Class", "Students' individual work", "Open Education + Class".

Model "*Distributed Class*"

The distance education algorithm built according to this model assumes working with the use of a PC and the Internet in an online mode. In this case, a teacher and students interact only through interactive telecommunications, being in remote locations.

Model "*Students' individual work*"

Distance education with the use of this model assumes different location of educational process participants and their interaction in a free mode, not bound to a single time of being in a network. At the same time, the teacher provides students with all the educational and methodological base and knowledge materials and introduces them to the content of the curriculum for the study of a specific discipline in a distance mode. Interaction between the teacher and students takes place in question-and-answer mode on special forums, in chat rooms or using e-mail. The assessment of acquired knowledge and skills is also done remotely.

Model "*Open Education + Class*"

The work of the participants of educational relations using the possibilities of this model is the implementation of a complex of pedagogical technologies that are in demand in the models described above. The educational process is based on complex work with printed and electronic educational materials, inclusion of technical means, etc. All this allows students to develop their learning style on the basis of personal thematic preferences, at an individual pace, personally or in groups performing the task.

Discussions

Among the authors of the model approach to distance learning we should mention Khutorskoy (2001), who developed a number of educational models aimed at remote communication between a student and a teacher. They are based on interactive interactions of educational process participants with digital knowledge resources. The paradigm of the models developed by Khutorskoy (2001) shows a peculiar hierarchy in terms of the share of the remote component in the learning process - from the minimum to the maximum possible. The researcher emphasizes that his models do not claim to be exclusive in the use of school practice and, on the contrary, will only benefit from a combination with other, for example, traditional methods of teaching children. In addition, the models developed complement one another perfectly and can be used by a teacher either individually, in combination or in different variations. More detailed characteristics of the remote education models developed by Khutorskoy (2001) are given in Table 1.

Table 1 – Distance Learning Models (according to Khutorskoy)

Model	Location of learning participants	Distance Learning Content
School – Internet	Full time school	Supplementary education, working with information
School – Internet - School	Two or more full time schools	Supplementary education, distance projects
Student - Internet - Teacher	Full time school and distance students	Supplementary education, concentration on selected topics, exam preparation
Student - Internet - Center	Distance Education Center	Basic and supplementary education in individual mode
Student - Internet	Several full time and distance schools	Basic and supplementary education in individual mode

A detailed study of the principles of application and basic characteristics of existing models of distance education allows us to talk about the greatest demand for two of them: the first one involves remote interaction of educational process participants without reference to time and instantaneous use of interactive means of communication, the second one is based on the simultaneity of teacher and student, that is their interaction in real time.

Thus, we can summarize that the most common forms of distance learning are instant or time transgressive pedagogical communication between a teacher and students. The process of transformation of the traditional educational space at all levels of education today is accompanied by the one-step creation of a legal framework as applied to the educational relationship "teacher-student".

Conclusion

In conclusion, we should say:

1. Distance learning is a type of educational process related to the remote interaction between a teacher and a student via PC, Internet, Skype, social networks, etc. Basically, such interaction is carried out synchro-

nously by its participants and allows optimizing the learning process by individualizing the process of acquiring knowledge and skills.

As a result of distance learning, students are able to achieve their educational goals in terms of knowledge or skills related to a particular subject in a comfortable environment and avoid the stress of face-to-face learning.

The results of the research carried out to identify the impact of interactive distance technologies on the educational process in secondary schools allow us to talk about the adequate compatibility of these forms of activity. Among the advantages of distance learning should be called the strengthening of student motivation, the formation of a special communicative environment, the use of a significant arsenal of pedagogical tools, the availability of classes with professionals in the field under study, improving the skills of working with the PC and the Internet environment, improving the quality of teaching and learning.

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