## The role of Internet technologies in the educational process Sergeeva N.¹, Dmitrienko N.² Роль интернет-технологий в процессе обучения Сергеева Н. Н.¹, Дмитриенко Н. А.²

<sup>1</sup>Сергеева Надежда Николаевна / Sergeeva Nadezda - аспирант,
кафедра педагогики и психологии;

<sup>2</sup>Дмитриенко Надежда Алексеевна / Dmitrienko Nadezda - кандидат педагогических наук, доцент,
кафедра иностранных языков,
Донской государственный технический университет (ДГТУ), г. Ростов-на-Дону

**Abstract:** the article analyzes the role of the Internet-technologies in the learning process. The ways of introduction of information technologies in various areas of the educational system.

**Аннотация**: в статье анализируется роль интернет-технологий в процессе обучения. Рассматриваются пути внедрения информационных технологий в различные области образовательной системы.

**Keywords**: internet-technology, training program, programmed instruction.

Ключевые слова: интернет-технология, обучающая программа, программированное обучение.

37.013.75

Information technology and computer communications turned from festive reception in innovative everyday necessity. ICT are great importance for solving the problems facing the modern school, that is, informatization acts as a factor of modernization of the entire education system.

Important role played by the use of Internet technologies in the educational process:

- 1. Internet-based technologies are expanding the boundaries of possibilities, the children not only receive a free access to all sorts of information, but eventually learn to think more broadly and thus develop their imagination, sense of confidence in their abilities and thrust to the development of new areas of knowledge [F. I. Sharkov «Interactive electronic communications» (emergence of «The fourth wave»): Manual; Dashkov and To; 2012].
- 2. The Internet-based technologies is the ability to quickly find something of their own, it is first and foremost new opportunities for self-realization.
- 3. Due to the internet technologies in teacher there are many possibilities of a new dialogue with the students. He can use any means of communication through the Internet ICQ, e-mail, chat rooms and forums, and even use the internet, being directly adjacent, in the classroom with students, to find on the internet appropriate examples for the use of all resources of the Internet in education. Communication can be a two-way, and can be one-sided, so you can respond to the letter, as well as the teacher can post useful information in his blog, or on a special website.
- 4. Internet technologies allow for the holding of conferences on various topics between schools, regions, cities, countries
  - 5. Sharing knowledge, new information, the involvement of students in this process.
- 6. Conducting interactive contests, test [I. G. Zakharov «Information Technology in Education» Textbook. allowance. The Academy, 2012].

Currently, the development of education informatization following trends are:

- 1. Formation of the system of continuing education as a universal form of activities aimed at the continuous development of the individual throughout life.
  - 2. Creation of a uniform information educational space.
  - 3. Active introduction of new means and methods of training, focused on the use of information technology.
  - 4. Synthesis of means and methods of traditional and computer education.
  - 5. Create advanced education system.
- 6. Changes and maintenance work of the teacher [O. N. Griban New information technologies in teaching: analysis of educational practice // Historical science and history education as factors of humanization of society: Sat. scientific. Art. / USPU. Ekaterinburg, 2012. Part I. The S. 192-199].
- 7. The teacher ceases to be a «loudspeaker» of knowledge, it is the developer of a new technology training, on the one hand, it increases creativity, and on the other requires a high level of technological and methodological training.

There is a new direction of activity of the teacher - the development of information technology training, software and methodical training complexes.

A new view of learning using ICT has been programmed instruction. Under programmed instruction refers to a controlled absorption of the educational material with the help of the training device (computer, programmed textbook). Programmed educational material is a series of relatively small portions of training information (frames files steps) supplied to some logical sequence.

Works Skinner, Crowder and other educators and researchers have given impetus to the development of three different types of training programs (OP): linear, branched, and adaptive, with the help of which the process of programmed instruction in modern school built.

Linear OD - a training program in which all teaching material is divided into a sequence of semantic units («batches»), covering the whole thing logically. These «portions» should be small enough that the student did as little as possible errors. Control tasks are performed at the end of each «batch», but the order of the study «portion» is not dependent on the fulfillment of these tasks results.

Extensive OP differs from the linear so that the student in the case of an incorrect answer, additional information may be provided in the performance of supervisory tasks, which will allow it to perform the control task.

Building Adaptive Subdivision is based on the hypothesis that a number of errors is necessary for successful learning, if the student does everything correctly, the training effect will be less. The number of errors is used as follows:

- 1. If the error rate falls below a certain level, the degree of learning difficulty is automatically increased.
- 2. With increasing error rate above a certain level the degree of difficulty is automatically reduced.

Relatively new to the education system is the use of case-technology, understood as a form of distance learning technology based on the use of sets (cases), text, audiovisual and multimedia teaching materials and mailing list for self-study by students in the organization of regular consultations in-tutors teachers traditional or remotely.

When using computer and telecommunication networks actively used technology case for group and individual consultations, conferences, correspondence and provide trainees learning information from electronic libraries, databases and electronic management systems. As TB notes Ustinova, training materials, used by a case-technology, different completeness and integrity of the system organized by a set of materials. The advantages of these materials the author are: accessibility, visibility, sound lectures, the presence of interactive exercises, animated examples of problem solving, the ability to work with non-linear materials provided hyperlinks. This kind of technology is used in both part-time and distance learning. Case technology, on the one hand, allows you to organize the individual pace of learning, on the other - is aimed at in-depth study of the subject. The above information technology effectively used in educational practice, both abroad and in our country [T. B. Ustinova «Case-technology as a condition of activization of independent work of students» // Access: http://festival.1september.ru].

Patriotic education system, which has an appropriate regulatory framework, aimed at training qualified competent professionals. Development of common cultural and professional competences today is impossible without the use of new information technologies. Information provision of modern educational space should be located at a level which would allow the teacher to deal with all educational and training its tasks quickly and efficiently. Information technologies allow to find a solution (or set of solutions) for a particular teaching situation.

The introduction of computer technology in the learning process creates conditions for the intensification of the educational process. Using computer technology makes changes to the objectives and content of training, new methods and organizational forms of training.

New information technologies in education in general and in education, the teacher can be applied in almost all stages of the educational protsessa. Teacher can change and expand this list in accordance with its business. In this paper we will discuss the main information technology, they will be shown the advantages of using them in the learning process [S. L. Lobachyov of «Basis of development of electronic educational resources» of INTUIT 2013].

At the present stage in the transition to an information society modern education is simply impossible without the new information technologies and which is characterized by active development of new information and communication technologies. This process is considered as the creation of a unified educational electronic environment, the purpose of which - to make the learning process more effective, successful integration into the education system.

This active and practical application of acquired knowledge for the broader goals - the primary task for the teacher and for the student. To this must be universally implement computer technology in educational institutions, but also to integrate ICT with a real educational process.

## References

- 1. The federal law of 29.12.2012 N 273-FZ (an edition of 13.07.2015) «About education in the Russian Federation» (with amendment and additional, in force from 24.07.2015).
- 2. The order of the Ministry of Education and Science of the Russian Federation of 09.01.2014 N 2 «About the statement of the Order of application by the organizations which are carrying out educational activity, electronic training, remote educational technologies at realization of educational programs».
- 3. Lobachyov S. L. «Basis of development of electronic educational resources» of INTUIT 2013.
- 4. *Sharkov F. I.* «Interactive electronic communications (emergence of «The fourth wave»): Manual; Dashkov and To; 2012.
- 5. *Griban O. N.* New information technologies in teaching: analysis of educational practice // Historical science and history education as factors of humanization of society: Sat. scientific. Art. / USPU. Ekaterinburg, 2012. Part I.
- Rudakova D. T. «Interactive video conference: experience, problems and prospects» [Electronic resource].
   Access:
- 7. // http://distant.ioso.ru.
- 8. *Yemelyanov N. C., Partyka T. L.* «Protection of the information in a personal computer «Acad-tion: Forum. 2009. S. 462.
- 9. Zakharov G. «Information Technology in Education» Textbook. allowance. The Academy, 2012.

- 10. Katorin Y. F., Spivak A. I., «Protection of information by technical means». 2012.
- 11. D. O. Kosolapov «Building multilateral algorithms under different security models. « Cand. Sci. Sciences. Moscow, 2010.
- 12. S. I. Maslova «Informatization of education: trends, tools and technologies: Textbook. « Benefit / under total. Ed. Maslov. M .: Publishing House MEI, 2004. 127 c.
- 13. T. B. Ustinova «Case-technology as a condition of activisation of independent work of students» // Access: http://festival.1september.ru.