

**ИСПОЛЬЗОВАНИЕ ИНФОРМАЦИОННО-КОММУНИКАЦИОННЫХ ТЕХНОЛОГИЙ В СОВРЕМЕННОЙ ОБРАЗОВАТЕЛЬНОЙ СРЕДЕ**

Научная статья

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**Аннотация**

Статья посвящена вопросу использования современных информационных технологий в обучении иностранным языкам. Также в статье раскрывается суть понятия «информационно-коммуникационные технологии», описаны виды обучающих интернет-ресурсов. Средства ИКТ подразделяются на аппаратные и программные, они эффективно применяются в современной образовательной среде. Предполагаемые результаты дальнейшего исследования, направленного на проверку эффективности Веб-квеста в улучшении языковой компетенции учащихся, представлены в статье.

**Ключевые слова:** образовательная среда, компьютеризация, информационные образовательные технологии, телекоммуникация, информационные и коммуникационные технологии, хотлист, трежа хант, сабджект сэмпла, мультимедиа скрэпбук, Веб-квест, аппаратные и программные средства ИКТ.

**THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE MODERN EDUCATIONAL ENVIRONMENT**

Research article

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**Abstract**

The article is devoted to the question of use of modern informational technologies in teaching foreign languages. The essence of the notion “information and communication technologies” is also revealed, kinds of learning Internet-resources are described. ICT-means are classified into hardware and software. They are efficiently applied in the contemporary educational environment. The prospective results of the further research directed at the testing of the efficiency of Web Quest in improvement of students’ language competence are presented in the article.

**Keywords:** educational environment, computerization, informational educational technologies, telecommunication, information and communication technologies, hotlist, treasure hunt, subject sampler, multimedia scrapbook, web quest, hardware and software ICT-means.

**Introduction**

Life in the twenty-first century changes rapidly. Modern world sets up new rules and standards which, consequently, reflect upon the sphere of education. Nowadays, raising and teaching a person capable of living in constantly changing, highly technological world has become one of the most important directions of modern education. As a result of computerization of the system of Russian education, the priority project «Современная цифровая образовательная среда в Российской Федерации» (СЦОС) (Modern digital educational environment in the Russian Federation) (MDEE) has been approved.

The aim of the project (СЦОС/ MDEE) is to provide incessant teaching of all categories of citizens during their life period in any place, and in any time according to their individual plan [2], [4]. All these reforms give an impulse to emergence and evolution of recent methods and pedagogical technologies.

**Method**

Selecting and analyzing the material for the article, we studied a number of theoretical sources on the question of information and communication technologies used in modern education. We analyzed definitions of the word combination “informational educational technologies” to specify its meaning, studied and compared different opinions of modern scientists working on this problem to form our own understanding of the topic we are working at.

**Discussion**

Under pedagogical (educational) technology, G. K. Selevko understands “the system of functioning of all components of pedagogical process, built on the scientific basis, programmed in time and space, and leading to the established results” [5]. According to G. K. Selevko’s opinion, informational educational technologies comprise all technologies applied in the sphere of education which use special technical informational tools (computer, audio, and video, movies) in order to achieve pedagogical aims. If, together with it, telecommunication is used, the term “information and communication technologies” (ICT) appears [5].

There are several definitions of the term telecommunication. E.S. Polat, for instance, defines this notion in such a way:

In the international practice, under the term of “telecommunication”, the transmission of arbitrary information to a distance by means of technical devices, h. e. telephone, radio, telegraph, television etc., is understood.

In school practice, speaking of telecommunications, we often mean transference, reception, processing, and storage of information by means of computer, or on special high performance communication lines, or on traditional telephone lines with

the help of a modem, or with the help of satellite connection. All mentioned above is united under the term of computer telecommunication [3, P.147].

ICT have their own means. Under ICT-means, I.V. Robert understands “hardware and software tools and devices, functioning on the base of microprocessor-based computing equipment as well as modern means and systems of information exchange, providing operations on gathering, production, accumulation, keeping, processing, and transmission of information” [4, P.10]. ICT-means are classified into hardware and software.

Hardware ICT-means are: computer, printer, projector, telecommunications unit, input devices for text information and for screen objects manipulations (keyboard and mouse), devices for recording (input) of visual and audible information, computer-controlled devices, in-classroom and in-school network, audio-video means [6].

Among software ICT-means, can be named the next ones: means of general purpose and those connected with the hardware ones (drivers and so on), sources of information – organized information files, virtual constructors, training apparatus, kinds of test environment, comprehensive training packages (electronic textbooks), management information systems [6].

So, under ICT in the sphere of education we understand all the technologies applied in the educational environment, which use devices, mechanisms, methods and algorithms of transference, reception, processing, keeping and use of information for achievement of definite pedagogical aims.

Contemporary education requires from a teacher to be competent in the sphere of ICT, and be able to apply and introduce these means correctly in the process of teaching. For such correct introduction, there were some methods of different aspects of foreign language teaching, teaching of various kinds of speech activity and culture by means of definite internet-technology developed. During the experiment held by specialists, the efficiency of using the new methods in the process of teaching has been proved. Most scientists agree that applying of learning Internet-resources in foreign languages studying is effective methods of teaching, especially when we intend to widen the pupils’ horizons in the sphere of intercultural competence and country study, to train reading and writing skills.

Making a search for necessary information in the Internet, pupils can get even more information than from textbooks and teaching materials. Simultaneously, reading and listening can be actively practiced. Moreover, the use of different linguistic resources allows children to study language more deeply, to increase their vocabulary, to develop their communicative skills. Besides, in the Internet, there is an opportunity to study the authentic texts, that is an integral part of learning a foreign language. But here students can face a serious problem; among the vast variety of sites, existing in the Internet, there are numerous ones with unreliable information. Which of them can be trusted? Certainly, pupils are not experienced enough to decide which sources are credible and which are not. Here, the teacher should come to rescue and suggest reliable educational resources. There are five kinds of learning Internet-resources recommended in English literature: hotlist, treasure hunt, subject sampler, multimedia scrapbook, and web quest [9, P.102].

“Hotlist” is a list of necessary for the pupil text Internet-resources on studied subject or topic, selected by the teacher [10], [6, P.102].

“Multimedia scrapbook” is a selected in accordance with the studied topic list of not only text multimedia resources, but, unlikely to hotlist, also with photos, audio files, video clips, graphic information [6, P.103].

“Treasure hunt” contains both above mentioned Internet resources. Except references, questions on the content of the site for directing search activity of a student by the teacher are added [6, P.103-104].

“Subject sampler” contains all three above mentioned resources, but, unlikely these resources, this kind of Internet resource is directed at the discussion of socially acute and hot topics. Students are supposed not only study new for them information, but also express their own, fortified by arguments, opinion on the question discussed [6, P.104].

Educative “web quest” is considered to be the most difficult type of educational Internet-resources. Web Quest is a script of guiding project activity of pupils on any theme with the help of the Internet resources. Web Quest can be designed to 2-3 lessons or to the whole academic year, depending on its educative aims. This Internet resource comprises four resources mentioned above.

The essence of the activity is: pupils in the class are divided into small groups; each group covers one of the aspects of the topic studied by the class at the present moment. The pupils look for the required information on definite sites, selected by the teacher. Then they unite all the information found with that, found by other members of the working group. Finally, they present their work to the teacher or the whole class in one of the chosen by them, together with the teacher, forms. Web Quest performance suggests preliminary preparation for it, when all pupils in the class get acquainted with the general information on the studied topic. After that, the teacher together with the pupils distributes the topics among the mini-groups. The more mini-groups, the more aspects of the studied topic can be covered [1], [6, P.104-105].

## Results

In our teaching practice we decided to hold an experiment to make sure all methods mentioned above are really effective. The object of our research is using of ICT in teaching pupils of the tenth form a foreign language. The subject of the research is information and communication technologies as means of teaching pupils English language.

In accordance with the experiment we plan to select two groups of pupils “control team” and “experiment team”. The “control” group pupils are supposed to complete the project task, presented in the educating materials «English», Afanasyeva O.V., Mikheeva I.V. for the 10th year, the topic chosen is «Famous British artists». The “experiment” group pupils are going to do the web quest as a project on the same theme.

The prospective results of the research are supposed to include:

Creation of the educative product of the author of the experiment’s pedagogical activity Web Quest «Famous British artists»;

Improving the quality of the pupils’ training;

Increasing the motivation of pupils to study;

Developing of critical thinking;

Acquisition independent activity skills by students;

Creating conditions for personal fulfillment of pupils in extracurricular activities, developing of communicative universal learning activities (ULA);

Increasing the cognitive interest to the subject;

Facilitating formation of the ICT competence.

After the task completion by both groups we plan to compare and analyze the findings. The analysis of the results of the research is supposed to include the assessment of the degree of universal learning activities forming at the lesson, distinguishing the difference between the general aim of the lesson and the results of the lesson, finding the reasons of the gap, conclusion and self-assessment [9]. The results of the prospective experiment we plan to highlight and present in the further articles.

### Conclusion

Appearing forms and modern methods of teaching involving ICT tend to be introduced in contemporary education. Certainly, they meet the requirements of the modern education standards, and scientists are quite optimistic about the progress of new technologies, which facilitate the process of getting necessary information, making the process of studying more effective and interesting. However, we should not get into extremes concerning computerizing of the whole process of studying. We should not forget that the negative side of the computerization also exists, so the detrimental influence on the health of pupils, addiction of the young to the virtual world of Internet have not been studied properly yet.

### Конфликт интересов

Не указан.

### Conflict of Interest

None declared.

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