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Information and communication technologies in teaching professionally- oriented speaking to technical students in non-linguistic higher education institutions

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Abstract.

The article discusses the use of information and communication technologies (ICT) in teaching a foreign language to students of technical sciences at non-linguistic universities. Currently, this is the main mechanism aimed at improving the effectiveness of training and aimed at developing motivational potential and an individual approach. ICT significantly intensifies the independent work of students. The paper describes the benefits of using ICT. The authors present the basic types of ICT for the training of highly qualified specialists in the field of political science. The work emphasizes the role of the teacher, who in this situation acts as an active assistant, and his main function is to organize and promote the learning process. The authors also give practical recommendations for improving the effectiveness of teaching a foreign language using ICT. As the advantages of computer programs, the possibility of their flexible use, depending on the features and structure of texts, is emphasized.

Keywords:

information and communication technologies
ICT
foreign language teaching
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educational process

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The use of new information technologies in the process of teaching students of technical specialties in a non-linguistic university is one of the most important aspects of improving and optimizing the learning process, enriching methodological tools and techniques that allow diversifying the forms of work.

There are many different definitions of the term "information and communication technology" depending on the approach. So, according to Wikipedia, Information and Communication Technology (ICT) is an extensional term for information technology (IT) that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage and audiovisual, that enable users to access, store, transmit, understand and manipulate information. [1].

In modern sources, information and communication technologies represent a wide range of digital technologies used to create, transmit and distribute information and provide services (computer equipment, software, telephone lines, cellular communications, e-mail, cellular and satellite technologies, wireless and cable networks communications, multimedia, and the Internet).

The modern educational paradigm, based on the use of computer teaching aids, takes as a basis not the transfer of ready-made knowledge, skills and abilities to students, but the development of self-education skills in a student. At the same time, the work of students in the classroom is in the nature of communication with the teacher using interactive computer programs and audiovisual means.

Information and Communication Technology consists of various tools and systems that can be exploited by capable and creative teachers to improve teaching and learning situations.

Scientists believe that any teaching method is enriched by integrating information technologies, but in the process of teaching general education disciplines, they are only a means of learning. [2]

Means of information and communication technologies are software, hardware and devices that operate on the basis of

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microprocessor, computer technology, as well as modern means and systems for broadcasting information, information exchange, providing operations for the collection, production, accumulation, storage, processing, information transfer and access to information resources of local and global computer networks.

The most commonly used ICT tools in the educational process include:

- electronic textbooks and manuals which are demonstrated using a computer and a multimedia projector;
- electronic encyclopedias and reference books;
- simulators and testing programs;
- educational resources of the Internet,
- DVD and CD discs with pictures and illustrations,
- video and audio equipment,
- research work and projects.

There are several classifications of ICT tools. So, in accordance with the first [3] classification, all ICT tools used in the education system can be divided into two types: hardware (computer, printer, scanner, camera, video camera, audio and video recorder, etc.) and software (electronic textbooks, simulators, test environments, information sites, Internet search engines, etc.).

The breakthrough in the field of ICT, which is currently taking place, forces us to reconsider the issues of organizing information support for cognitive activity. Thus, the second classification of ICT tools allows us to consider the possibilities of using information technologies in educational activities:

- to search for literature on the Internet using browsers such as Internet Explorer, Mozilla Firefox, Opera, Safari, etc., various search engines (Google.com, Yahoo.com, Bing.com, etc.) and work with it (summarizing, note-taking, annotation, citation, etc.);
- for working with texts using the Microsoft Office package of basic application programs: Microsoft Word and OpenOffice Writer allow you to create and edit texts with graphic design;
- Microsoft Power Point allows you to create presentation slides for a more colorful presentation of the material;

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- Microsoft Excel allows performing calculations, analyzing and visualizing data and working with lists in tables and web pages;
- Microsoft Office Publisher permits you to create and modify booklets, brochures, etc.;
- for automatic text translation it is good to use Systran, Meta, M-Translate, Google Translate and electronic dictionaries TheFreeDictionary [4], Macmillan Dictionary [5], OxfordLanguages [6], Collins English Dictionary [7], Urbandictionary [8], Cambridge Dictionary [9];
- for storage and accumulation of information (CD-, DVD-disks, Flash-disks);
- for communication (Internet, email, Telegram, Skype, Viber, etc.);
- for processing and playing graphics and sound (MicrosoftMediaPlayer, AIMP, KMPlayer),
- programs for viewing images (ACDSee, PhotoShop, CorelDraw),
- programs for creating diagrams, drawings and graphs (Draw.io, Visme, Edraw), etc.

The listed ICT tools provide an opportunity to organize independent work of students in English classes. They can use computer technologies both for studying individual topics and for self-control of the acquired knowledge. Moreover, the computer is the most patient teacher, capable of repeating any tasks as much as necessary, achieving the correct answer and, ultimately, automating the practiced skill.

Speaking about the peculiarities of the use of information and communication technologies in organizing the cognitive activity of students, it should be noted that with traditional methods of conducting a lesson, the main carrier of information for students is the teacher; he requires the student to concentrate, focus, and strain memory. [10] Not every student of a technical specialty in a non-linguistic university is able to work in this mode. Psychological features of character, type of perception become the cause of failure.

At the same time, modern requirements for the level of education do not allow reducing the amount of information necessary for mastering the topic of the lesson.

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However, when organizing a lesson using computer programs, information is provided to students in a colorful way, using animation effects, in the form of text, diagrams, graphics and drawings. All this, according to modern didactics, makes it possible to explain the educational material more clearly and accessible than orally. It is also very important that in such classes the student can work individually, advancing in the comprehension of new material at his own pace, returning to the incomprehensible, if necessary, or looking ahead.

The computer is loyal to the variety of answers: it does not accompany the work of students with laudatory or disapproving comments, which develops their independence and creates a favorable socio-psychological atmosphere in the classroom, giving them self-confidence, this is an important factor for the development of their individuality.

Thus, speaking about the advantages of students working with a computer, its indisputable advantages should be mentioned:

- general cultural development of students;
- improvement of computer skills;
- improvement of the language level;
- creating a favorable psychological climate;
- increasing the motivation of students and their interest in the subject;
- self-affirmation of students;
- the possibility of implementing individualization of training;
- implementation of the feedback principle;
- great opportunities for visual presentation of the material;
- exclusion of time for writing material on the board;
- economy of expenditure of materials of the teacher;
- improving the process of checking the work of students;
- increasing the authority of the teacher;
- a combination of control and self-control;
- objective and timely assessment of students' actions;
- activation of skills of independent work.

The use of modern pedagogical technologies allows you to go:

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- from learning as a function of memorization to learning as a process of mental development;
- from a static model of knowledge to a dynamic system of mental actions;
- from focusing on the average student to differentiated and individual training programs;
- from external motivation of learning to internal moral and volitional regulation.

Today, new methods using ICT tools are opposed to traditional teaching of foreign languages. This form of organization of classes is the most accessible for the work of a teacher and its application in the classroom in a non-linguistic university.

Social networks are also an inexhaustible source of materials that can be used to motivate students in learning foreign languages. Social networks provide collaborative opportunities where innovative ideas or materials can be made available to users through courses, PDF/Word files, or slides. So, for example, documents are created, as a rule, including educational materials, events that are shared using microblogs; questions with multiple choice of answers are introduced, which force students to choose the right one; open-ended questions that provide students with the opportunity to give a free answer, based on their personal language background.

In terms of audience use, social media offers an interactive approach. Priority is given to communication in real and authentic situations, personal, group work and with a teacher, the development of cultural interactions, as well as reading and creative writing, implementing various types of texts and compositions, various levels of languages. Thus, one of the actual goals of teaching a foreign language is the integration of social networks into the educational process. [11]

When learning through social networks, special attention is paid to closed thematic groups, where interested potential participants are invited. These virtual closed spaces used in online learning are a place of exchange and interaction within the framework of various events or content (documents, articles, videos).

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On some platforms, such as Facebook, thematic broadcasts are organized live, and all members of the group are notified about it. This means that teaching foreign languages is transferred to a new dimension and teachers have the opportunity to broadcast their course to a large audience that goes beyond the academic one, and directly involve those who want to learn a foreign language in the broadcast.

In the context of foreign language teaching, the use of social networks can contribute to the introduction of a hybrid learning formula, transforming extracurricular learning into self-education. The technical aspects of this software and its simplicity facilitate the exchange between group members, thus facilitating the exchange of information and resources to further improve the learning process.

The use of information and communication technologies in foreign language classes reveals the enormous potential of the computer as an effective learning tool. [12] Computer training programs allow you to train various types of speech activity and combine them in different combinations, to understand language phenomena, contribute to the formation of linguistic abilities, create communicative situations, automate language and speech actions, and also ensure the implementation of an individual approach and intensification of independent work of students.

Teaching phonetics and reading is one of the main tasks. Therefore, English language teachers are trying to find such methods and forms of work that would provide them with the opportunity to fulfil this task with the greatest efficiency. Here, too, we are helped by the methods of working with the use of ICT. Firstly, at every opportunity, you should use training programs with phonetic exercises in the classroom. But due to the fact that time is limited, it is recommended to deal with such programs on your own outside the walls of the university. Secondly, when explaining the rules of reading, it is good to use PowerPoint presentations.

Formation of phonetic speaking skills, organization of communication in pairs and small groups using role-playing games based on simulation programs. The ability to inform, explain, approve, convince, congratulate, describe, etc. Students are offered websites on a specific topic related to

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the topic being studied. For example, when studying the topic "London", students take a virtual tour of the city and talk about what they see. Pair work can be carried out, in which students act out a dialogue between a resident of London or a guide and a visitor.

These technologies open up great opportunities for teachers who are looking for additional tools in these technologies to solve their professional problems. The latest information technologies in teaching make it possible to more actively use the scientific and educational potential of leading universities and institutes, attract the best teachers to create distance learning courses, and expand the audience of students.

As technology becomes more and more embedded in our culture, we must provide our learners with relevant and contemporary experiences that allow them to successfully engage with technology and prepare them for life after school.

In order to be able to implement ICT in the classroom, it is necessary to be trained and to know the tools that new technologies provide us with, as well as to define the needs of the students and the curricular objectives. Only in this way will it be possible to create a flexible learning environment and implement the strategies and tools necessary for them to develop all their capabilities.

After analysing the experience of using ICT in foreign language classes and after school hours, we can conclude:

- multimedia technologies accelerate the learning process:

- contribute to a sharp increase in students' interest in the subject;

- improve the quality of assimilation of the material;

- allow to individualize the learning process;

- make it possible to avoid the bias of the assessment.

Consequently, the introduction of computer technology creates the prerequisites for the intensification of the educational process. They allow in practice to use psychological and pedagogical developments that ensure the transition from the mechanical assimilation of knowledge to mastering the ability to independently acquire new knowledge. Computer technologies contribute to the disclosure, preservation and development of students' personal qualities.

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