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## **THE USE OF MULTIMEDIA TECHNOLOGIES AS MEANS OF IMPROVEMENT IN THE PROCESS OF ENGLISH LANGUAGE TRAINING OF FUTURE DOCTORS**

### **Introduction**

The development of modern society occurs in the era of informatization, characterized by the use of information technology tools in many fields of human activity, including education. The peculiarity of the modern stage of informatization of higher medical education is associated with the fact that the content aspects of the training of a specialist at the university are coming to the fore. The quality of higher education depends on the successful solution of the problem. A graduate of the university has to master the methods of obtaining and processing information, learn how to use information technologies to maintain and develop his intellectual and creative potential. A rational combination of traditional educational tools with modern information and computer technologies is one of the possible ways of solving the task of modernizing education. Such methods contribute to the development of students' personal qualities as well as the variability of higher education. Modern information technologies provide active, creative teaching of the medical students, allow presenting the material at a new high-quality level. Their application opens new opportunities in the organization of the educational process of future doctors. The amount of time allocated to work with the computer is determined by the teacher depending on the didactic objectives of the class. Multimedia enable the combination of various types of information representation: text, graphical (static and dynamic), audio and

video information. When teaching foreign languages for medical students, multimedia may be recommended for performing phonetic and grammar exercises, for increasing active and passive students' vocabulary. Of particular interest are multimedia programs for training phonetics, since they allow to record students' own pronunciation, and then compare it with the standard, not only by hearing, but also visually, thanks to the graphical display of sound on the computer screen. The multimedia computer programs allow to realize the principle of visibility on a qualitatively new level. For example, the black-and-white text of the dialogue in the textbook certainly loses in comparison with the video recording of the conversation between a doctor and a patient. Consequently, the student has the opportunity to stop recording in the right place to listen to any passage a number of times, as well as to print the text of the statements. In addition, multimedia technologies make it possible to simulate the situation of the foreign language communication on the computer screen, which allows the student not only to hear the speech but also to observe the paralinguistic components of communication.

### **Literature review**

The main feature of English language contemporary training for future doctors is the tutor's ability to apply multimedia technologies during the classes as they offer wide opportunities for the integrated use of technical means. Ukrainian and foreign methodologists highlight the main motives for using multimedia technologies in foreign language teaching. Firstly, multimedia technologies are effective. Secondly, they increase the interest and motivation for learning foreign languages, as well as provide plenty of educational materials, new forms and methods, effectively support the learning process at medical higher schools. Furthermore, modern multimedia technologies give the possibility of immersion in another culture for its better understanding.

In order to objectively assess the role of multimedia tools and technologies in the process of teaching English to medical students, it is advisable to reveal the essence of the concept of multimedia.

The term "multimedia" is of Latin origin, which has spread through English-language sources. It arose by combining two English words, "multy, multiple<sup>1</sup>", and "media" (medium, medium). Thus, literally "multimedia" is translated as "many environments". The meaning of this term is given more often in some context, creating the so-called contextual definition that is based on

the knowledge of the connection between the definition and the context in which it is used. Contemporary training of medical students requires a clear and precise definition of the concept of “multimedia technologies” and their place in the educational process of a high school. In scientific and technical literature, there are various definitions, including contextual ones. The definition of multimedia (MM) varies depending on where and for whom it is used. In the UNESCO World Education Report, “multimedia” refers to the ability to submit text, images and sound to the user. Shlykova (2004) means MM as a multichannel medium that issues information in a variety of modalities. In the dictionary (2004), “Golosarium” MM is defined as a set of computer technologies that simultaneously use several environments: graphics, text, video, photo, animation, sound effects, high-quality audio. Some authors mean MM as a modern information technology, combining graphic and video images, sound and other special effects with the help of computer means. According to the encyclopedia “Kyril and Methodius” (2012) MM is an electronic information medium that includes several of its types (text, images, animation, etc.). In the electronic dictionary, ABBYY Lingvo 10 (2018) multimedia is a common name for software tools that allow the simultaneous use of audio and video information. There is a definition of multimedia technologies as a set of modern means of audio, television, visual and virtual communications, which are used in the process of organization, planning and management of activities. Some sources treat MM as the interaction of visual and audio effects under the management of interactive software. Others – as computer systems with software support for audio and video.

At the moment there are various approaches to the definition of this term. Thus, Cherednichenko treats multimedia as “the interaction of visual and audio effects under the control of interactive software” (Cherednichenko, 2014, p. 115). In general, the fundamental approaches to the interpretation of this concept are based on “the functional side of the phenomenon, as a means of software and hardware, and on the basis of the interactive nature of the phenomenon (the student’s active participation in working with information)” (Baranova, 2013, p. 3).

At the present stage, there already exists an extensive research base in which the key aspects of the influence of the used multimedia tools on the quality and effectiveness of the learning process are highlighted; the mechanisms of multimedia translation of information and its perception by students are analyzed. This takes into account the specificity of mastering foreign language

medical vocabulary. This allows us to identify the most important competitive advantages of using multimedia in comparison with other information technology tools, as well as traditional approaches to teaching medical students foreign languages.

### **Characteristics of MM tools effects**

It is worth identifying the most significant characteristics of the influence of multimedia technologies on the process of learning medical English from the cognitive point of view:

1. stimulation of the development of logical and critical thinking, imagination, improvement of the mechanisms of individual and personal perception among colleagues;
2. the synergistic effect of a combination of visualization of the presented information and the auditory impact (syncretic training);
3. improvement of communication skills, organic immersion in the sphere of business foreign language communication, which is especially important because of the stay of students mainly in a non-language environment;
4. intensive formation of linguistic abilities, practising speech and language actions (Bryzhina, 2012, p. 160);
5. encouraging medical students to realize their creative abilities, effectively develop and master individual cognitive and creative potential due to the variety of ways of information exchange in the context of the use of multimedia tools and technologies.

Taking into account the above arguments, it can be concluded that multimedia technologies greatly contribute to the intensification of education at higher medical institutions, to bring the intellectual process of acquiring knowledge in the field of medical English to a qualitatively higher level.

Along with mastering such professionally necessary fields as the technique of translating foreign literature, working out the correct pronunciation, improving writing and speaking, using multimedia technologies, students gradually form a certain level of information technology literacy (Baranova, 2013, p. 101). Consequently, medical students are learning to better navigate the information space, find the necessary information and differentiate its sources. Especially important in this approach is the fact that the learnt material is focused on especially important aspects for future doctors. Besides, there

is an increasing interest in the process of learning a foreign language for business communication in the field of medicine. The key role in this process is played by the interactivity of multimedia tools and technologies used for learning.

Many researchers and experts emphasize the special importance of MM technologies as a factor that stimulates the independent work of students during learning of medical English. This is very important as the tendency to reduce the number of classroom hours is observed. According to Vasilovskaya, computer application creates the most flexible, optimal learning conditions for medical students. Each student independently chooses for himself the mode of operation, selects the material according to the level of complexity, the speed of reproduction and the form of presentation of information (Vasilovskaya, 2008, p. 233). In general, this contributes to increased motivation for self-education, improvement and self-realization of medical students.

Today there is a popular way to learn foreign languages on Skype, as it is a distance learning and it can be an alternative to courses and other training. Students who learn a foreign language at a higher medical education institution have the opportunity to expand and complement the knowledge gained at the university, in particular, through communication with a native speaker colleague on Skype. The advantages of such education include the student's independent choice of time and duration of classes, as well as the formation of a differentiated student-centred approach (Bryzhina, 2012, p. 162). In addition, it is possible to organize online conferences, case histories discussions, and discussions of serious diseases, their prevention and treatment with the colleagues-native speakers. This is a step towards the elimination of psychological barriers and difficulties in the learning process, influencing more productive interaction between teachers, students and doctors as well as the exchange of opinions and new knowledge.

In addition to performing a cognitive function, multimedia systems have a number of important technical properties and characteristics that contribute to a significant simplification and acceleration of the process of learning medical English, increasing its efficiency and effectiveness:

1. storing and processing information in digital form speeds up the process of its search and systematization, transferring from one technical device to another;
2. the ability to record and listen to audio files, view various video files;

3. the transformation of information into various symbolic forms in order to solve specific problems;
4. saving time when extracting the necessary medical information materials from the electronic network (Banartseva, 2014, p. 137);
5. the ability to quickly check the results of tests and creative tasks in the online mode, which is convenient for both the student and the teacher.

Among the advantages of multimedia technologies, there is a possibility of individual work realization, availability of timely feedback, opportunities for visual presentation of the material. Multimedia technologies enable varying tasks and problem situations. By means of various combinations of text, graphics, sound there is the opportunity to quickly memorize the material that is learnt.

Multimedia presentations are widely used in training of future doctors as they increase interest in gaining knowledge, facilitate the process of learning language, support the students' attention. Students work on different medical themes, for example, "Cardiovascular diseases", preparing presentations and showing them in front of the class with the comments. Creating presentations, medical students use the PowerPoint program. Such type of work makes medical English language classes not only informative but also well designed and planned.

Application of the PowerPoint program opens up the perspective of increasing the motivation and interest of medical students to gain new knowledge, providing active creative work, and stimulating cognitive thinking of the students. The usage of presentations allows the teacher to effectively manage the attention of students in the classroom, overcome the passive way of transferring knowledge, and support students' interest in medical English learning.

Multimedia presentations allow affecting several types of memory: visual, auditory, emotional and in some cases motor. Providing such an opportunity as interactivity, computer presentations allow to effectively adapting the training material to the particularities of the medical students. Increasing interactivity leads to more intensive participation in the learning process of the student himself, which contributes to memorizing the perceived material.

Moreover, it is possible to use the multimedia presentations in the educational process at different stages of the lesson, while the essence of it as a visual means remains unchanged, there is only change of its forms, depending on the purpose of the lesson. Watching videos, which shows oral presentations to an audience, serves for relieving the tension of students who are afraid of

public speaking, and during the English classes, they practice oral answers to the essay, presentations and summaries in front of the class. After reviewing the video, you can give an assessment of the content, discuss the presentation style of the speaker. Such video lessons present language in a lively context, connect the lesson with the real world and show the language in action. This is a learning tool that enriches the materials that are already existing. The video, among other things, can help overcome the cultural barrier in language learning. Before classes, you can easily download clips from YouTube or RealEnglish.com and at the right moment in the lesson, you will demonstrate this or that video. It is not worth overloading a lesson with video materials, however, there are a number of situations in the class when the video is beneficial. For example, it removes the language barrier; shows the communicative side of the language through learning facial expressions and gestures and retelling; enriches the vocabulary; stimulates communication or discussion; themed videos increase students' motivation to learning.

## Conclusion

Thus, on the basis of the analysis and given examples, it can be concluded that the use of MM technologies has a significant effect on the process of learning medical English at higher medical schools, increasing the efficiency and effectiveness of this process. Teachers and students need to further develop innovative technologies and approaches to achieve high results and enhance motivation, interest in the learning process. The use of multimedia technologies is an effective means of forming a communicative culture of medical students, immerse them in a situation in which they learn the language, get acquainted with the realities of the language they learn. The video material, the tasks for understanding, allow future doctors to interpret mimics and gestures, to recognize the style of relationships in order to decrease the number of mistakes when communicating with foreign colleagues and patients.

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## USING MULTIMEDIA TECHNOLOGIES TO IMPROVE THE PROCESS OF ENGLISH LANGUAGE TRAINING OF FUTURE DOCTORS

**Summary:** The use of multimedia is of particular importance in the teaching of a foreign language to medical school students, since mastering a language in artificial conditions, that is, outside the language environment of native speakers, requires creating situations that would stimulate communication in the target language. The use of information technologies in combination with the project methodology allows students to practice their knowledge and skills, and is one of the forms of organizing research activities that successfully implements cooperative activities and motivation to learn a foreign language.

**Keywords:** multimedia, future doctors, English language training



## **WYKORZYSTANIE MULTIMEDIÓW W NAUCZANIU JĘZYKA OBCEGO STUDENTÓW SZKÓŁ MEDYCZNYCH**

**Streszczenie:** Wykorzystanie multimediów ma szczególne znaczenie w nauczaniu języka obcego studentów szkół medycznych, ponieważ opanowanie języka w sztucznych warunkach, czyli poza naturalnym środowiskiem językowym, wymaga stworzenia sytuacji stymulujących komunikację w danym języku. Wykorzystanie technologii informatycznych w połączeniu z metodologią projektu pozwala studentom zastosować swoją wiedzę i umiejętności w praktyce i zwiększa motywację do nauki języka obcego.

**Słowa kluczowe:** multimedia, przyszli lekarze, szkolenie w języku angielskim