



# Multimedia Educational Tools As An Important Factor of The Development Of Students' Competence

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## ABSTRACT

*This article talks about multimedia educational tools, and by applying them to the teaching processes of the higher education system, the content of the levels of formation of students' knowledge, skills and qualifications is highlighted.*

### Keywords:

modern educational tools, multimedia concept, multimedia educational equipment, creative thinking, multimedia educational elements.

Currently, while the educational system of our country is developing, the need for modern educational tools is increasing day by day. The main problem is that enriching students with technical-technological knowledge, forming their intellectual potential, as well as solving issues such as increasing high competition.

Modern educational tools - interactive, audio-visual, multimedia educational equipment - are not just tools that are becoming fashionable, but also a varied opportunity for the development of students' personality [1]. The task of the modern education system is not only to impart knowledge, but also to help design the creative thinking of students. Any theoretical knowledge should be strengthened by practice. Therefore, in addition to the theoretical information provided by the teacher, practical, laboratory and project activities are required in the educational process. This is a factor that

helps to form skills and abilities for independent research work and should be used throughout the entire educational activity. It is very important to actively involve and interest students in the educational process. The educational process is very effective based on the fact that teaching is interesting and that all students are fully active in it. Based on the above, there is a need to introduce a new effective, universal pedagogical method that can help to solve important tasks for the training of specialists. To do this, it is necessary to ensure that classes in laboratory stands and educational workshops are not only interesting, but also comfortable and easy for all students. The training should be attractive, take into account all mental and didactic factors, demonstrate the processes in a lively way, conduct training and master the taught subject, in general, the entire educational process it is necessary to increase its effectiveness, to provide students with the

opportunity to evaluate their acquired knowledge. From this point of view, the application of modern multimedia technologies helps to solve the above-mentioned tasks and to eliminate a number of shortcomings of the traditional teaching method. The concept of multimedia refers to a set of tools that process information in various forms. Based on this concept, multimedia can be defined as follows.

Multimedia is an interactive visual and audio effect under the control of interactive software using modern technical and software tools, which combines text, sound, graphics, photos, and video in a single digital presentation [2].

In the process of higher education, teaching students on the basis of technical tools and multimedia technologies, it is proven in practice that it helps the given knowledge to be quickly and easily assimilated, and that it is well understood and stored in memory. In addition, the possibility of organizing video conferences in the educational system is one of the achievements of the educational process. It is no exaggeration to say that this opportunity is an important factor in students' ability to exchange ideas, develop free and creative thinking, and have the ability to convey their thoughts correctly and clearly.

The introduction of modern multimedia technologies into the teaching processes of the higher education system allows to achieve the following results compared to traditional education:

- enrichment of tables and pictures with color, sound, animations, hypertext;
- use of interactive web elements, tests;
- ability to memorize and apply knowledge;
- regular updating of information;
- more individual work with students in the educational process, increasing their interest in the lesson, supporting and developing their acquired knowledge;
- strengthening interdisciplinary relations in the educational process, comprehensive study of reality;
- problem-solving and decision-making skills;

- to improve the flexibility, forms and methods of the educational process, technological base by introducing modern ICT tools.

In addition, students get information about events, activities, news and achievements in the educational process in other countries of the world through Internet systems. It is known that multimedia technologies enrich the educational process, educational material makes it possible to improve the perception of educational information.

Mayer also mentioned the potential advantages of multimedia materials. By allowing the listener to receive video and audio information, multimedia has a certain advantage over either of these options taken separately. Despite the fact that these two channels of information reception are very different from each other, their combination in multimedia is very successful, because it effectively uses the advantages of both systems. Connections between text and graphics provide ample opportunities for a deeper understanding of the topic and better formation of a mental model (imagination) [3, 4].

Effectively designed educational environment (including multimedia educational environment) includes the following 4 elements:

1. Display of information.
2. A guide on where to start and how to proceed.
3. Exercises for understanding and retention.
4. Self-evaluation to determine the need to repeat what has been passed or to move to the next stage (step).

These four elements are used in education using e-learning resources or in combinations with traditional types of education.

can be used. Use all elements without multimedia

although it is possible to use these elements in multimedia

makes them more effective and important. The purpose of quoting data from

Meyer's research is to show how multimedia can affect the retention and transmission of information if the following principles are followed. These principles originated from scientific ideas about the limitations of working memory and the principles of encoding in long-term memory.

In conclusion, it can be said that today multimedia educational tools are one of the promising directions of informatization of the educational process. The introduction of multimedia software tools into the educational process is an important condition for the intellectual development of students and the socio-economic development of our society.

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