# **OPPORTUNITIES FOR THE USE OF MULTIMEDIA IN EDUCATION**

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**Abstract:** This article describes the purpose and basis of the use of multimedia in the modern educational process, as well as analyzes its capabilities.

*Keywords:* interactive whiteboard, personal computer, pedagogical skills, multimedia technologies, e-learning resources, modeling. Intellectual games, distance learning.

### ВОЗМОЖНОСТИ ИСПОЛЬЗОВАНИЯ МУЛЬТИМЕДИА В ОБРАЗОВАНИИ

*Аннотация:* В данной статье описаны цель и основа использования мультимедиа в современном образовательном процессе, а также проанализированы его возможности.

**Ключевые слова:** интерактивная доска, персональный компьютер, педагогическое мастерство, мультимедийные технологии, электронные образовательные ресурсы, моделирование. Интеллектуальные игры, дистанционное обучение.

#### **INTRODUCTION**

Multimedia products are making progress in all areas. The main areas of application of multimedia technology are education in the broadest sense: video encyclopedia, interactive guide, simulators, intellectual games, computer training system and distance learning. The multimedia system can be successfully used not only in higher and secondary education, but also in training centers and preschools. Equipped with multimedia devices and programs, as well as an interactive whiteboard, a computer system is slowly becoming a universal teaching or information medium in human activities and fields of knowledge. PCs with a multimedia board will become universal teachers and media in almost all areas. All you need is a CD-ROM tutorial. Multimedia technologies are widely used in schools, high schools, colleges, institutes and universities in various fields of education.

# MATERIALS AND METHODS

There are two ways to use multimedia products in the pedagogical process.

1. Use of software products available in the market that correspond to the scope of the subject taught. Experience has shown that the choice is more complicated, because the existing products must be relevant to the subject program, meet the requirements of reliability, acceptance, completeness of the information provided by the educator. This is due to the fact that in many cases the process of creating a product does not involve a specialist-educator with the necessary knowledge in the field under study.

2. Creating a multimedia product that is relevant to the purpose of the subject taught by the teacher and the scope of the issues covered. To do this, science teachers need to improve their multimedia technology skills in a variety of courses, as well as learn more about computer capabilities, additional imaging tools, and the capabilities of an interactive whiteboard. Both of these approaches require a high level of professional knowledge in the field of multimedia technology, as well as good training in the effective use of hardware and software [1].

### RESULTS

There are two main types of multimedia systems used: personal computer-based with a set of external devices, and projector-based electronic board (interactive whiteboard) and system-based block learning. The use of multimedia in education allows you to:

-ensure the humanization of education;

-increasing the effectiveness of the educational process;

-development of personal qualities of the student (mastery, thirst for knowledge, independent learning, self-education, ability to self-improvement, creative abilities, applying the acquired knowledge in practice acquisition, interest in learning, attitude to work);

-development of communicative and social skills of the student;

- the opportunities for individualization and differentiation of open and distance learning are rapidly expanding due to the individual education of each person with the help of computer tools and information e-learning resources;

- to look at the learner as an active learner, to recognize his / her value;

-take into account the personal experience and individual characteristics of the student;

- carry out independent learning activities, in which the student learns and develops independently;

-to develop in learners the skills to use modern educational technologies to help them adapt to today's rapidly changing social conditions in order to successfully carry out their professional tasks [2].

There are several approaches to classifying multimedia tools. In most cases, they are classified according to their functional or methodological purpose. Classification of multimedia teaching aids by functional purposes.

-the teacher provides educational information and directs the student to study in accordance with the acquired knowledge, capabilities and interests;

-diagnostic tools are designed to determine the level of consciousness and readiness of the student;

- designed for the development of equipment, software, training materials;

-science-oriented, designed for modeling;

-management tools designed to manage student performance in the course of work;

-administrative tools for automating the organization of the educational process, document preparation and exchange;

-provides game tools, a variety of games and playful learning activities.

Classification of multimedia teaching aids by methodological purposes.

-teacher - designed to learn new material;

-trainers - designed to develop skills and competencies through the repetition and consolidation of learned materials;

- supervisor - designed to monitor the level of mastery of the training material;

-media - these tools are designed to obtain the necessary information;

-modeling - designed to create a model of an object, process and event in order to study and research it;

-imitative tools - are designed to study any specific aspect of reality, its functional characteristics in a defined way with limited parameters;

-demonstration tools - designed for visual presentation of educational material, as well as for the visualization of the studied laws, the interaction of objects;

-games - designed to play (experience) learning situations, which are carried out in order to adopt the most optimal solution or strategy of actions;

- recreation tools - designed to develop students' attention, reaction, memory, etc. outside of the learning process [3].

# DISCUSSION

The process of implementing multimedia-oriented person-centered learning requires the development and optimal use of the most modern, multidisciplinary, subject-oriented multimedia teaching aids. They include an extensive database, a knowledge base in the field of education, artificial intelligence systems, expert-training systems, and laboratory practices with the ability to create mathematical models of the processes and events being studied. Multimedia is useful and productive because of its ability to take into account the individual characteristics of learners and help increase their interest (motivation), as well as the combination of different types of multimedia educational information, interactivity, flexibility. lim technology. Ensuring interactivity is an important achievement of digital multimedia compared to other means of presenting information. Interactivity is the provision of relevant information according to the needs of the learner. Interactivity allows you to manage the presentation of information to a certain extent: learners can individually change the settings set in the program, study the results, respond to the program request about a specific request of the user, set the speed of submission and number of repetitions possible. However, there are a number of important factors to consider when using multimedia [4]. Multimedia learning materials need to be easy to understand, up-todate and accessible.

In order to fully explore the full potential of multimedia technologies and use them effectively, learners will need the support of a competent teacher. As with the use of textbooks, the use of multimedia is an educational strategy in which the teacher not only provides information in the learning process, but also enriches the content when assisting, supporting and managing the process. possible. Typically, presentations enriched with beautiful images or animations are more appealing than plain-looking texts, and they can provide the necessary level of emotion by complementing the material presented.

# CONCLUSIONS

Multimedia tools can be used in a combination of different educational directions (styles) and can be used by individuals with different mental and age characteristics of learning and knowledge acquisition: some learners directly o 'through winter, some like to learn and acquire knowledge by hearing and perceiving, while others (by watching videos). Interactive multimedia technologies provide extraordinary convenience for students with academic needs. In particular, it promotes the development of phonological and reading skills in students with hearing impairments, as well as their visual acquisition of information. In the case of speech and physical disabilities, it is possible to use the tools based on their individual needs. In short, at a time when science is advancing rapidly, the virtual education system has also found its place in our lives on a large scale. As we continue to contribute to the development of society in line with the times, we will at least justify the confidence of our President in our youth.

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