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# FORMATION AND DEVELOPMENT OF INFORMATION CULTURE - CONDITIONS AND TOOLS

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**Annotation:**The article discusses the fact that the creation of electronic educational tools for the development of students and children in educational subjects further expands the possibility of using modern information and communication technologies in the teaching of these subjects.
**Key words and concepts:**Information and communication, technology, teaching, interactive, activity, electronic, training, efficiency.

The modern world level of the development of information and communication technologies is such that the creation of a national system compatible with the integration of the infrastructures of the world information space and the national information and computing network in the republic is an important factor in the effectiveness of the national economy, management, science and education. These problems are very complex and at the same time urgent for our republic. The results of the implementation of economic, structural and other changes currently being carried out also depend on how and in what time frame the problems related to informatization are solved in the republic[1].

The creation of electronic educational tools for educational subjects further expands the possibility of using modern information and communication technologies in teaching these subjects. This, in turn, is the main factor of students' in-depth assimilation of knowledge in these subjects and increases the quality and efficiency of education.

The implementation of such efforts will further accelerate the wide application of modern pedagogical and information technologies in the educational process, equip professors and teachers with advanced pedagogical knowledge and technologies, improve their skills, and use the experience of foreign higher education institutions. provides an opportunity for in-depth study and introduction of their effective methods and tools into our national education system.

Multimedia is a rapidly developing modern information technology. Its distinguishing features include: it integrates different types of information: traditional (text, tables, decorations, etc.), original (speech, music, clips from video films, TV frames, animation, etc.) in one software product. Such integration involves various devices for recording and displaying information, work at a certain time, unlike text and graphics, which are static by their nature, audio and video signals are considered only at a certain time interval. The speed of the central processor for processing and displaying video and audio information on the computer, the bandwidth of the data transmission bus, the operating and video memory, large-capacity external memory, the size and the speed of exchange of computer input-output channels by approximately two times needs to be increased, a new level of "human-computer" interactive communication, in which the user receives more extensive and comprehensive information during the communication process, which makes it possible to improve the conditions of education, work or recreation[5].

The concept of multimedia entered our lives in the early 90s. What did he ask himself? Many experts analyze this term in different ways. In our opinion, multimedia is an embodied

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form of delivering educational materials to students based on audio, video text, graphic and animation effects based on software and technical tools of informatics.

The method of teaching in developed countries is currently being applied in the field of education. Even every family cannot have fun without multimedia devices. The gross turnover of multimedia tools in 1981 was 4 billion US dollars, and in 1994 it was 16 billion US dollars. Nowadays, it is impossible to imagine every computer sold without multimedia tools. Attempts to widely use computers in the field of education in the 70s were lost, first of all, due to their extremely low productivity. Practice shows that teaching students on the basis of multimedia tools is doubly effective and saves time. On the basis of multimedia tools, it is possible to save up to 30% of time in learning, and the acquired knowledge is stored in the memory for a long time. If the students accept the given materials on the basis of their understanding, the retention of information in memory increases by 25-30%. In addition, if educational materials are presented in audio, video and graphic form, retention of materials in memory increases by 75%.

Informatics and information technologies, as a fundamental science, deals with the development of a methodology for establishing management processes with information on the basis of computer information systems. There is also an opinion that one of the main tasks of science is to determine what information systems are, what place they occupy, what structure they should have, how they work, and what laws are characteristic of them. In Europe, the following main scientific directions can be distinguished in the field of informatics: network structure development, computer integrated process production, economic and medical informatics, social insurance and environmental informatics, professional information systems[7].

The emergence of the multimedia system has led to revolutionary changes in several professional fields such as education, science, art, computer training, advertising, technology, medicine, mathematics, business, and scientific research.

Although the idea of using computers in the educational system appeared much earlier, the use of information technology in all areas of the educational system became more complete after the advent of computers equipped with multimedia devices. was put into practice.

The use of multimedia tools in education provides the following opportunities:

- ensuring the humanization of education;
- increase the efficiency of the educational process;
- development of the learner's personal qualities (assimilation, thirst for knowledge, independent education, self-education, ability to improve oneself, creative abilities, applying acquired knowledge in practice ability, interest in learning, attitude to work);
- development of the learner's communicative and social skills;
- with the help of computer tools and information electronic educational resources, the possibilities of individualization and differentiation of open and distance education will be significantly expanded due to the separate (individual) education of each person;

to look at the learner as an active learning subject, to recognize his value;

- taking into account the personal experience and individual characteristics of the learner; conducting independent educational activities, in which the learner studies and develops independently; formation of skills in the use of modern educational technologies that help students to adapt to the current rapidly changing social conditions in order to successfully perform their professional tasks[11].

The process of self-directed education with the help of multimedia tools requires the development and use of modern, multi-disciplinary, subject-oriented multimedia educational tools.

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They include a wide database, educational knowledge base, artificial intelligence systems, expert-teaching systems, laboratory practices with the possibility of creating a mathematical model of the studied process and phenomena.

According to the possibilities of taking into account the individual characteristics of learners and helping to increase their interest (motivation), as well as the combination of various types of multimedia educational information, interactivity, and flexibility qualities, multimedia is useful and productive education. lim technology.

Providing interactivity is one of the important achievements of digital multimedia compared to other means of presenting information. Interactivity refers to the provision of relevant information in accordance with the needs of the learner. Interactivity allows you to control the presentation of information at a certain level: learners can individually change the settings defined in the program, study the results, respond to the program's request about the user's specific wishes, set the speed of presentation of materials and the number of repetitions.

But it is important to consider a number of aspects when using multimedia. Educational materials presented in multimedia should be easy to understand, presented through modern information and convenient tools[14].

In order to fully reveal all the possibilities of multimedia technologies and use them effectively, students need the support of a potential (competent) teacher.

As with the use of textbooks, in the use of multimedia tools, the educational strategy is enriched with content only when the teacher is engaged not only in providing information, but also in helping, supporting and guiding the learning process. possible Presentations enriched with beautiful images or animations are usually more attractive than plain text and can complement the material being presented and provide the necessary emotional level.

Multimedia tools can be used in harmony with different educational directions (styles) and used by people with different mental and age characteristics of learning and receiving knowledge: some learners directly o and some like to learn and acquire knowledge by hearing and others by watching (video films).

In short, interactive multimedia technologies provide unconventional comfort to the learner with academic needs. In particular, it ensures the growth of phonological skills and reading skills of students with hearing impairment, as well as their visual acquisition of information. For those with speech and physical disabilities, it allows them to use the tools based on their individual needs.

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