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PEDAGOGICAL OPPORTUNITIES FOR DEVELOPING FUTURE TEACHERS' COMPETENCE IN MULTIMEDIA TECHNOLOGIES

Abstract: This article discusses in detail the pedagogical possibilities of developing the competence of future teachers in multimedia technologies and the directions of their use in the educational process. The uniqueness of this article is that it is aimed at increasing the effectiveness of the educational process for students of higher educational institutions in multimedia technologies, as well as increasing the availability of educational material for students through clarity, convenient navigation, interactivity and a large volume of educational materials.

Keywords:computer, multimedia, multimedia tools, multimedia software, multimedia motivation, information and communication technologies, text, audio, video, graphics, animation, component, development of communication skills, skills, integration

Introduction: When considering the use of multimedia tools in the higher education system, it is worth noting that in many literatures aimed at teaching information and communication technologies, various terms related to computer technology are used. Surprisingly, their meanings are also interpreted differently in different literatures. This creates various difficulties for users in mastering computer language. Achieving uniformity in this regard is considered the solution to the problem. The main types of information and communication technologies used in education can be: multimedia software tools, specialist training systems; educational databases; knowledge base training; multimedia tools; computer educational telecommunication networks.

Multimedia software is a set of software, technical means and teaching aids that provide active communication with the student. It is necessary to pay attention to the didactic and psychological aspects of establishing communication with the student. The main means of interaction between multimedia software and the user is communication, that is, dialogue.

Multimedia is a tool or medium for learning in various lessons. Multimedia helps to develop motivation, communication skills, master skills, accumulate factual knowledge, as well as develop information literacy. Multimedia also introduces a moral component - computer technology will never replace communication between students. It can only support the potential for joint search for new resources and is suitable for use in various learning situations where students communicate with their peers and teachers on the material being studied in the process of studying the subject. The use of ICT in the lesson enhances positive motivation for learning and activates the cognitive activity of students.

Limited studying environments

Specialist training systems include knowledge in a specific field of science. The design and development of specialist training systems is carried out using special tools.

Computer systems of new information technologies - decision support systems - are designed to help users master topics that are not perfectly structured. Such systems act as an assistant that allows you to expand your capabilities, but do not replace your own judgment or system of preferences. Due to the need to take into account subjective opinions, the decision-making process is fully formalized using a computer.

The educational database and knowledge base allow students to complete assigned learning tasks, that is, to create a set of multimedia information and select, sort, analyze and process various information from this set. The databases contain a description of the main concepts of the field of science,

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strategies and tactics for solving problems, a set of exercises and examples, information on errors made by students and how to eliminate them.

When introducing information technologies in the educational process, the following methodological rules should be followed:

1. Information technologies in education (IT) are not an end in themselves, but a means aimed at solving the problems of real changes in the quality of education and increasing its effectiveness.
2. The latest information technologies are not opposed to the traditional education system, but are naturally and optimally integrated into it, taking into account pedagogical expediency, which requires a comprehensive assessment of the effectiveness of using information technologies in combination with various pedagogical technologies.
3. The most important value guideline for the use of information technologies is an appeal to the student's personality; creating the most favorable conditions for the assimilation of socially accumulated experience in the content of education; not only to gain deep and fundamental knowledge, to develop students' thinking, creative individuality, etc., but, first of all, to demonstrate their independence - self-development and self-realization of the individual.
4. ICT does not replace the teacher and does not replace his main functions, but rather objectifies and strengthens the individual techniques and components of his activities, redistributes the individual functions of the teacher between the student and the computer, and optimizes professional pedagogical activity.

Another advantage of using multimedia in education is that students can independently acquire additional knowledge. Because the need for independent learning after class will certainly help in individual acquisition of knowledge and increase existing knowledge.

Multimedia electronic software uses various technologies, as it is aimed at making the educational process interesting and effective by combining text, audio, video, graphics, animation and interactive elements. The following are the main technologies used in multimedia electronic software:

The use of multimedia tools allows you to develop the following main methodological features of organizing the educational process:

1. lessons using multimedia presentations are conducted using multimedia projectors;
2. it is advisable to conduct part of the lessons in the form of interactive games;
3. some topics can be studied using the project method;
4. wider use of the problem-based learning method, development of real programs (documents, tables, databases) that students can use in the educational process;
5. during practical classes and consultations on coursework, each student should be allocated a separate computer, in which case it is advisable to create his personal folder;
6. An individual approach should be used in practical training.

It can be said that the correct use of the capabilities of modern information technologies in the educational process contributes to the following:

1. Activation of cognitive activity, improving the quality of students' educational activities;
2. Achieving educational goals with the help of modern electronic educational materials intended for use in educational processes.
3. Development of self-education and self-management skills in students; increasing the comfortable level of learning.
4. Reduction of didactic difficulties among students.
5. Increasing the activity and initiative of students in the lesson; developing information thinking of students, forming information and communication competence.

Multimedia technologies allow for the programmatic integration of text, graphic, and animated presentations with the results of modeling the processes being studied. This allows for the

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implementation of the classical principle of didactics - the principle of accuracy - at a new, qualitatively higher level.

Multimedia has such qualities as flexibility, interactivity, and the integration of various multimedia educational information.

As G.B.Polovina noted in her scientific research, "the use of multimedia technologies in the educational process has a number of advantages over traditional education:

• allows the use of colorful graphics, animation, sound, hypertexts;
• allows for constant updating;
• allows for the placement of interactive web elements, for example, tests or a workbook;
• allows for non-linear transition of material due to numerous hyperlinks".

Students turn out to be too based on the teacher

Multimedia and hypermedia technologies combine powerful distributed educational resources that provide an environment for the formation and demonstration of key competencies, primarily involving information and communication.

The positive trend of increasing the attractiveness of multimedia technologies in the educational process does not exclude the following problems faced by teachers:

The need for independent technology development and training	• lack of preparatory courses
The complexity of creating materials	• creating audio, video, and graphics is much more difficult than writing simple text
Availability	• Not all teachers have the necessary hardware and software resources, and not all classrooms have the appropriate equipment.
Time-consuming	• Creating multimedia products independently takes some time

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Conclusion.

According to the pedagogical scientists of the Commonwealth of Independent States G.J.Otegen, L.Akzulla, S.I.Turekhanova, "Multimedia technology tools enrich the learning process and make learning more effective by improving the perception of educational information and involving most of the emotional components of the user students in the process. Through the use of multimedia technologies, oral speech has changed from static to dynamic, that is, it becomes possible to observe the processes being studied over time.

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