



ADVANTAGES AND DISADVANTAGES OF USING MULTIMEDIA TECHNOLOGIES IN THE EDUCATIONAL SYSTEM

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ABSTRACT

The article examines the problem of using multimedia educational tools as an effective source of filling and transferring knowledge. Particular attention was paid to the following positive aspects of the use of multimedia teaching tools: improvement of methods and technologies, change of traditional forms of teaching and creation of new ones, improvement of teaching efficiency, students' self-confidence formation of motives for self-development of learning, quick control and analysis of obtained results, increasing the amount of information over a certain period of time. The following negative aspects of the use of multimedia instructional manuals are considered: the reduction of social relations, the reduction of interaction and communication, the formation of individualism, the difficulty of transitioning from a symbolic form to a system of practical actions.

The problems related to the introduction of multimedia teaching aids into the educational process are analyzed: searching for information in telecommunication networks, preparing the teacher to work with

multimedia tools, changing the role of the teacher in the educational process, and compliance with requirements.

KEYWORDS

Multimedia teaching tools, teaching methods, teaching technologies, teaching effectiveness, methodological recommendations for the lesson, regulatory and legal basis of teaching.

INTRODUCTION

Modern society is inextricably linked with the process of change, therefore information of education through the introduction of multimedia and computer technologies is one of the priorities. These directions correspond to educational goals that require updating the methods, tools and forms of educational organization. The following scientists were involved in the organization of learning using multimedia: R.Kh. Ayupov, S. Beknazarova, Ya. Mamatova, S. Sulaymanova, S.S. Babadjonov, N.A. Muslimov, A.Kh. Makhmudov, Yu.N. Egorova, I.G. Zakharov, N.V. Klemeshova, O.G. Molyaninova and others.

The effectiveness of using multimedia tools in the educational process was revealed in the works of N.G. Popova, I.V. Robert, E.M. Savchenko and others.

A comprehensive study of the problem, multimedia teaching tools give students the opportunity to use non-traditional sources of information, contribute to the introduction of radically new forms and methods of teaching, and can significantly increase the quality of education, as well as the form confirms the opinion.

Teaching using multimedia educational tools has a number of advantages over traditional education [1, 2]:

1. Large volumes of data are divided into parts.
2. The selection of information is carried out at the level of students' cognitive logic.
3. Students' self-awareness through problem modeling and design processes.

4. Advanced student activity skills (strategic, research, project, phase).

5. Surprise motivational "points" of students.

6. Text, graphics, diagrams, sound, animation, etc.

All of the above is a reason to emphasize that without multimedia, the modern educational process is significantly impoverished.

Despite the active use of multimedia training manuals, the problem of their implementation remains very relevant.

In order to properly and effectively use multimedia teaching aids in the educational process, it is necessary to take into account their main positive and negative aspects.

The positive aspects of using multimedia educational tools are related to the following [3]:

- improvement of methods and technologies for the selection and formation of educational content;
- making changes to the system of traditional forms of education;
- organization of new forms of mutual relations in the educational process;

- individualization and classification of students of the higher education system, increasing the effectiveness of teaching through the use of additional motivational tools;

- formation of students' motivations for self-education and self-development;

- changes in the content and character of students' and teachers' activities;

- theoretical training using practical training;

- operative control and analysis of obtained results;

- increase in the amount of information in a certain period of time;

- taking into account the specific features of the studied subject;

- selection of information in the logic of knowledge of students and at the level of their perception.

The use of multimedia educational tools increases the effectiveness of education, which is related to the following[3]:

- develops a deeper approach to education in children;

- stimulates the tendency to learn;
- develops teamwork skills;
- stimulates cognitive aspects of learning;
- increases children's motivation to study;
- creates psychological comfort for schoolchildren;
- contributes to the transition from a passive to an active way of performing the activities of students who have become full-fledged subjects of educational activities.

The disadvantages of using multimedia educational tools are as follows[2]:

- social contacts are limited,
- social interactions and connections are reduced,
- individualism is formed,
- prevents the transition from the symbolic form of knowledge representation on the display screen to the system of practical actions, which has a logic different from the logic of the organization of the sign system.

The effect of introducing multimedia tools is possible if methodological requirements are taken into account [4]:

1. Communication and interaction of conceptual, figurative and effective components of children's thinking.
2. The reflection of the system of scientific concepts in the form of a hierarchical structure.
3. Perform guided learning activities.
4. Compliance with health measures.

The listed methodological requirements allow the teacher to transfer knowledge to students as qualitatively as possible, as a result of which the individual and age characteristics of students are taken into account, and the educational process meets the requirements established on the basis of established laws.

The formation of these personal qualities of the student should be helped by multimedia educational tools, which contain rich information and reference materials on educational websites and web quests, which will give the student a complete knowledge of scientific information.

allows to get and helps the teacher to teach the student and diagnose his achievements.

2. Requirements for mastering the main educational program of the higher education system.

The personal results of mastering the program students reflect the formation of the following qualities:

- effective cooperation with people of different ages in educational and research activities, educational and innovative activities;
- the ability to learn and self-educate throughout life;
- awareness of the impact of socio-economic processes on the natural environment, etc.

The meta-subject results of the student's mastery of the program should reflect the formation of qualities:

- successful mastering of educational, research and project activity skills;
- successful navigation in various information sources:

- the ability to clearly, logically and correctly express one's point of view orally and in writing using information and communication technologies, etc.

The scientific results of mastering the program by students should be determined at the following levels:

- basic (systematic knowledge of the standard model);
- profile (in-depth study of the topic);
- integrated (study of science based on general ideas, theories, rules, ending with a collection of subjects related to one field of education).

Based on the requirements of the modern education system, multimedia that teaches, diagnoses, guides, teaches, monitors, informs, shows the listed requirements for the results of mastering science can be done with the help of educational tools[4].

3. Requirements for the implementation of the main educational program of the higher education system.

Based on the content of this article, we will consider only the requirements related to the use

of multimedia tools in the educational process and specified in the State Educational Standard.

The conditions for the implementation of the main educational program of the higher education system are as follows:

3.1. Educational programs should be aimed at personality development, formation of basic competencies, development of independent, creative experience in design, education and research, information, art, etc.

3.2. Use of modern educational technologies in the educational process.

3.3. Effective management of an educational institution using information and communication technologies.

In fact, multimedia educational tools allow not only teaching, and knowledge replenishment, but also the management of the educational process based on diagnostic, management and control programs.

4. Requirements for the teacher.

In terms of methodological approaches to the use of multimedia teaching aids and the teacher's

ability to use them in the educational process, it is recommended in the state educational standards:

1) the educational institution must constantly provide. providing scientific, theoretical, methodological and informational support to professors and teachers;

2) encourage the teacher to use modern pedagogical technologies.

5. Informational and methodological conditions of program implementation.

Implementation of the educational program should be provided with a modern information-educational environment:

- digital educational resources;
- a set of technological tools of information and communication technologies;
- the system of pedagogical technologies of teaching in the modern information-educational environment.

All of the above confirms the opinion that the teacher should use multimedia teaching tools and multimedia teaching technologies in the system in his professional activities. However, there are a

number of issues that prevent the proper implementation of this standard.

The main problems of using multimedia tools are as follows[1]:

1. The problem of searching for information in telecommunication networks. Teachers working in the open education system should know where and how to find multimedia teaching materials in telecommunication networks, be able to use such networks in various aspects of teaching and learning, and the content of educational subjects through multimedia technologies. must know how to show it and how to use it.

2. The problem of preparing the teacher to work with multimedia tools. Effective development of the potential of multimedia tools requires appropriate training from the teacher, which should be based on the following rules:

- multimedia educational tools are only a tool for solving problems, and their use should not become an end in itself;
- learning to work with multimedia is part of the educational content;

- the use of multimedia educational tools expands the possibilities of human thinking in solving problems;

- learning to work with multimedia tools is a way of forming thinking.

3. The problem of changing the role of the teacher in the educational process.

With the introduction of modern multimedia technologies in education, the culture of the educational institution and the role of the teacher in the educational process are also changing. In connection with the focus on a self-learning, the direction of advice and correction in the teaching activity of the teacher is increasing, the requirements for the professional training of the teacher in the main and related subjects are increasing. The requirements for the teacher's personal, general cultural and communicative qualities also increase significantly.

4. The teacher's compliance with didactic requirements for the educational process using multimedia educational tools and the problem of their competence.

The teacher should acquire basic computer skills, learn to work with text editors, spreadsheets,

crosswords, slides, ready-made multimedia educational programs, work with colleagues and students with telecommunication tools.

5. The problem of publishing special publications aimed at increasing the interest of the pedagogical community in the development and implementation of modern multimedia technologies.

Methodological publications should be aimed at a wide range of specialists:

- training of teachers of all fields and levels;
- teachers-methodists of various subjects;
- training of various specialists
- training of specialists in various fields of informatics, such as human-computer interface, graphic programs, artificial intelligence, computer technologies, telecommunications;
- psychologists, economists, sociologists, linguists.

6. The problem lies in the lack of a regulatory and legal basis for conducting the educational process using multimedia educational tools.

The transition to new educational structures inevitably requires changing the entire complex of regulatory and legal support of the educational process using multimedia instructional materials.

It is impossible to achieve high results in education without using new information technologies in education. The use of multimedia technologies together with traditional technologies allows one to achieve the maximum level of education. Multimedia lessons form students' scientific worldview and complete perception of the surrounding space. Working with multimedia equipment is fun and easy, and learning is fun for children. Multimedia - lessons have a positive effect on the cognitive activity of students, increase motivation to study the subject, form speculative images and models, and develop self-knowledge and self-development processes.

10. Publication of special publications aimed at increasing the interest of the pedagogical community in the development and introduction of modern multimedia technologies.

These publications can and should become a center for the exchange of experience and transfer of knowledge and skills, a link that unites

the activities of all those involved in the development and practical application of modern multimedia tools and resources.

In conclusion, it can be said that an important condition for improving the quality of education is the formation of teachers' information-pedagogical competencies, one of which is the competence to introduce new information technologies in teaching. The effectiveness of the teacher's professional activity and the level of students' developed competencies largely depend on how effectively and pedagogically well the students learn academic subjects. The introduction of the above amendments to the Law "On Education" allows for the adequate implementation of a new form of education in accordance with the requirements of the State Education Standard using multimedia training manuals.

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