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METHODS OF TEACHING INFORMATION TECHNOLOGY BASED ON MULTIMEDIA APPLICATIONS

Begaliyev Fayzali Umaraliyevich
ФИО автора(-ов) Iqtisodiyot va pedagogika universiteti Samarqand kampusi, Iqtisodiyot va muhandislik fanlari kafedrasi assistenti

Abstract
This article considers the issues of effective teaching of information technology with the help of multimedia applications. It analyzes modern pedagogical technologies, the use of digital resources in education, the role of multimedia media in the educational process, opportunities for strengthening the role of teachers and students. Opinions are given on teaching methods based on multimedia applications, tools for improving the effectiveness of the lesson. The study provides recommendations for teaching information technology science from an interactive approach.

Keywords: Multimedia, information technology, digital education, electronic resources, teaching methods, interactive lessons, ICT tools, visualization, virtual laboratories, digital didactics.

Introduction
Today, the role of information and communication technologies (ICTs) in the education system is increasing year by year. In particular, the science of information technology is one of the most important disciplines that forms the formation of digital literacy in modern society, which serves as the foundation for modern professions. And the use of multimedia applications in the teaching of this subject makes the educational process more effective, interactive and interesting.

Multimedia is a digital platform that combines many types of media such as text, graphics, audio, video and animations. The impact of visual and auditory media

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is incredibly important in deepening students' knowledge. Thus, in the teaching of information technology, it provides a combination of theoretical and practical knowledge to illuminate and facilitate the understanding of the essence of science through multimedia means.

Theoretical part

Understanding of Multimedia Applications and Their Role in Education

Multimedia applications are tools that combine different types of information (text, images, sound, animation, video) on a single software platform, creating a powerful and interactive learning environment. Such applications, especially in the science of information technology, perform the following functions:

- visual representation of the topic;
- presenting concepts in a dynamic way;
- possibility of conducting virtual experiments;
- encourage the reader to do independent research;
- gamification of topics.

Features of information technology science

Information technology requires from the student not only theoretical knowledge, but also practical skills. The student will learn in the following areas:

- work with computer systems;
- the basics of programming;
- databases;
- Internet technologies;
- information security;
- Use of office software.

Textbooks with simple text will not be enough for these directions. It is at this point that multimedia learning tools show their superiority.

Ways to use multimedia applications

1. Interactive Presentations: Visuals built in platforms such as PowerPoint, Prezi, Canva, and more, explain complex topics in a simplistic way. Educational Video Lessons: Video lessons from platforms such as YouTube, Khan Academy, Coursera, Udemy allow independent learning.3. Virtual labs: Experiments such

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as network setup, code writing, operating system installation and so on are conducted in simulation mode.

4. Gamification: Knowledge assessment through tools like Kahoot, Quizizz, Wordwall is conducted in an interesting way.

5. Multimedia tests: Interactive tests are created via TestMaker, Google Forms, LearningApps.

Multimedia for the management of student activities

Multimedia tools are useful not only for explaining the lesson but also for monitoring, grading and analyzing the student's performance. Through LMS systems such as Google Classroom, Moodle, Microsoft Teams:

- distribution of lesson materials;
- collect and check assignments;
- monitoring student participation;
- Can organize interactive forums and tests.

Pedagogical approaches and methodological recommendations

The following methodological approaches to teaching information technology are recommended:

- Konstruktsion yondashuv;
- Muammoli yondashuv;
- Collaborative limbs;
- Flipped classroom.

Conclusion

The invaluable role of multimedia applications in the teaching of information technology is invaluable. They not only make the learning process interesting and effective, but also develop the student's independent thinking, deepen knowledge, form practical skills. The ability of the teacher to choose and methodologically justify these tools is a guarantee of the quality of education. In addition, the development of digital competencies will be achieved through introduction of modern technologies into education.

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