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USE OF IT TECHNOLOGIES IN MATHEMATICS LESSONS

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Annotation
The article presents the use of ICT tools for the effective organization of the educational process and its success factors in various subjects. In the lessons, information is given about the role of ICT in increasing students' attention and management and activity.

Keywords: Information technologies, technical advantages, interactive lesson, multimedia, presentation.

Introduction

At present, the technologies of effective teaching and focusing students' attention during the lesson are one of the important practical issues. As we study this process, we can have the following. We can achieve this by involving them in the lesson and organizing new methodical processes through the field of information technology. A modern teacher must be well versed in both computer technology and information technology [1-5]. Currently, there are various opportunities for improving computer literacy: after-school continuing education courses, in-school computer courses, peer education and self-education. The mastering of ICT by the teacher is carried out in several stages:

- Acquaintance - mastering the general methods of using ICT;
- use - using ready-made e-learning resources to solve specific problems;
- integration- changing the teaching technology through the use of ICT;
- transformation - changing the content of education, developing one's own electronic educational resources.

The development of information competence of teachers is one of the conditions for the introduction of modern educational technologies, primarily ICT and design technologies, into the educational practice of the institution, which help:

- development of students' information competence;
- implementation of interdisciplinary communication both in the study of ICT in the information base of other subjects and in the use of ICT in science lessons;
- development of educational motivation;
- increase the cognitive activity of students;
- develop the ability to work independently;

- development of teamwork skills;
- development of communication skills;
- adjustment of students' self-esteem;
- strengthening students' self-confidence;
- development of assessment skills, etc.

The results of the use of ICT are comprehensive development of students and teachers, organization of the educational process at a high methodical level, and improvement of educational efficiency and quality [6-10].

With large class sizes and insufficient computer equipment, organizing a lesson using ICT can be problematic. Based on the technical support of the school, the organizational form of the lesson using ICT can be:

- frontal work in the classroom using one personal computer and a projector (or interactive whiteboard) to display and illustrate the studied material on the computer, to present the results of project activities;
- individual and group work in a computer class for 10-12 jobs for the organization of laboratory, creative, control and other independent work.

The form of organization of students' work in a specific lesson using ICT is determined by the number of workplaces in the computer class, the level of technological preparation of students, the content of the educational material, the goals and objectives of the lesson.

Each student on an individual computer (perhaps divided into small classes or small groups) is the best option.

With the presentation of the report, individual homework of students in electronic format (perhaps with a large class population, home computers and high educational motivation of students) is an acceptable option.

By dividing tasks into pairs (perhaps with no more than twice the number of students and self-assessment skills developed), paired computer work is an acceptable option for a weaker class.

Work in shifts at the computer for 2-3 groups of students (probably if the number of students is 2-3 times more than the number of computers and most students have developed the skills of independent work) the class is full is considered optimal when la. In order to effectively use ICT in the lesson, it is necessary to comply with a number of requirements: correctly defining the didactic role and place of ESM in the lesson; use of well-thought-out organizational forms of the lesson; rational combination of various forms and methods of ICT use, taking into account age characteristics and sanitary standards when working with a computer.

When preparing for lessons or extracurricular activities using ICT, the teacher follows the following algorithm:
Studying the program and requirements of the state standard, forming the goals and objectives of the lesson.
Studying the material of textbooks and additional manuals.
Assessment of technical capabilities (availability of equipment, computer room working hours, etc.).
Choose the available ERM according to the goals and objectives of the lesson.
If necessary, independently develop the missing ESM, involving experts and students for this.
Review and listen to all the selected material before the lesson, set the time and create a lesson script.
Currently, the use of modern educational technologies, including information and communication technologies, ensuring the personal development of the child by reducing the share of reproductive activity in the educational process, increasing the quality of education, in turn, the quality of secondary education can be considered as the main condition of reduction. Study load of students, effective use of study time.
The use of ICT in mathematics lessons allows to diversify the forms of work, students' activities, activate attention, and increase the creative potential of a person. The construction of diagrams and tables in the presentation allows you to save time and design the material more aesthetically. Use of illustrations, drawings, etc. Developing interest in the lesson; make the lesson interesting [11-14]. The use of ICT in mathematics lessons allows the use of various illustrative and informative materials.
Slides and presentations created in the Microsoft Power Point program are presented using the multimedia project. The use of this technology allows:
Increase the level of vision during training;
Revitalize the learning process, add entertainment elements;
Recent studies have shown that people simultaneously absorb 20% of what they hear, 30% of what they see, and more than 50% of what they see and hear. Therefore, ICT elements are very important and should be included in the traditional lesson.
The qualification of a modern teacher is a complex personal resource that provides the possibility of effective cooperation in the educational space and depends on the professional competencies necessary for this.
The use of ICT in mathematics lessons allows to diversify the forms of work, students' activities, activate attention, and increase the creative potential of a person. The construction of diagrams, tables in the presentation allows you to save time, make the material aesthetically pleasing. Use of illustrations, drawings, etc. developing interest

in the lesson; make the lesson interesting. The use of ICT in technology classes allows the use of various illustrative and informative materials. It is appropriate to use ICT in the study of individual subjects and sections of the program of labor education technologies. It depends on the following factors:

This educational direction provides, first of all, the formation and improvement of practical skills in material processing, modeling and design methods. Therefore, more time should be allocated to practical activities of students in the lesson.

There are not enough multimedia discs in the school media library. The existing discs have a narrow thematic focus and are not without a number of advantages. Professional skills of developers, beautiful graphics, they include good animation, multi-functional, etc. With their help, it is not possible to achieve all the goals set by the teacher in the lesson.

With all the notes and notes made on the board, all the work done during the lesson can be saved on the computer, including in video form, for later viewing and analysis. A teacher working with an interactive whiteboard can increase the level of understanding of the material through a combination of different forms of information transmission - visual and audio. In the course of the lesson, he can use bright, colorful schemes and graphics, animation with sound, interactive elements that respond to the actions of the teacher or the student. If necessary, if there are visually impaired students in the group, the teacher can enlarge this or that element depicted on the board. Visibility and interactivity are the main advantages of an interactive whiteboard. Interactive whiteboards correspond to the way of information perception that separates the new generation of schoolchildren, computers and mobile phones, they are more demanding for tests, independent work.

Thus, new information technologies, methodologically competent use, increasing the knowledge activity of students, will undoubtedly lead to an increase in the effectiveness of teaching.

The use of information and communication technologies in the educational process (ICT) helps:

To develop students' interest in the studied subject;

Stimulating the activity and independence of students in the preparation of materials, working with literature, extracurricular activities;

Formation of teamwork skills in discussing problems;

Ensuring the objective control of knowledge, the quality of material acquisition by students.

Computers help to save time and make work more efficient: search for information, solve more problems (and reduce homework), analyze results, use the computer's

graphic capabilities, help develop students' interest in the subject being studied, cognitive and encourages. creative activity and independence of students, formation of communication skills, ensuring objective control of knowledge, quality of mastering of material by students.

When presenting new material, the presentation becomes my assistant, because the presented material is partially shown on the slides, and I just have to fill it in, give my comments and explanations to the most difficult moments and images.

The use of multimedia presentations in the educational process allows to increase the quality of education and save time spent on methodological training.

Presentations can be used to explain new material, repeat previous material, and organize current knowledge control (presentations-questions). Inquiry presentations include student-directed assignments, which may include material that reflects key experiences or demonstrates what has been learned about the topic covered. physical phenomenon. The question given to students is in the title of the slide, comments and explanations of numbers are given by the teacher during the presentation. Such presentation-requests can be designed for students' frontal oral inquiry or frontal individual written inquiry (control work, written test work, independent work).

CONCLUSION

Undoubtedly, in a modern school, the computer does not solve all problems, it only becomes multifunctional. study of technical means. Modern pedagogical technologies and innovations in the educational process are important, they not only allow each student to "invest" a certain knowledge reserve, but also, first of all, create conditions for the manifestation of students' knowledge activity. But information technologies together with properly selected (or developed) teaching technologies create the necessary quality, variability, differentiation and individualization of teaching and learning.

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