USE OF INTERACTIVE METHODS IN TEACHING COMPUTER SCIENCE

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Annotatsiya: Informatika fani zamonaviy ta'lim tizimida muhim o'rin egallaydi. Bu fan nafaqat kompyuter texnologiyalarini o'rganish, balki axborotlarni qayta ishlash, tahlil qilish va ulardan samarali foydalanish ko'nikmalarini rivojlantirishga qaratilgan. O'qitish jarayonida interfaol metodlardan foydalanish, o'quvchilarning faol ishtirokini ta'minlash va ularning bilimlarini mustahkamlashda muhim ahamiyatga ega. Ushbu maqolada informatika fani o'qitishda interfaol metodlarning ahamiyati, turlari va ularning amaliyotda qo'llanilishi haqida ma'lumotlar berilgan.

Kalit so'zlar: informatika, interfaol metodlar, bilim, ko'nikmalar, kommunikativ yondashuv, zamonaviy texnologiyalar, loyiha, guruhli muhokamalar.

Аннотация: Информатика занимает важное место в современной системе образования. Этот предмет направлен не только на изучение компьютерных технологий, но и на развитие навыков обработки информации, анализа и ее эффективного использования. Использование интерактивных методов в учебном процессе важно для обеспечения активного участия студентов и укрепления их знаний. В этой статье представлена подробная информация о важности интерактивных методов, их видах и их практическом применении в обучении информатике.

Ключевые слова: информатика, интерактивные методы, знания, умения, коммуникативный подход, современные технологии, проект, групповые дискуссии.

Abstract: Computer science occupies an important place in the modern education system. This subject is aimed not only at studying computer technologies, but also at developing the skills of information processing, analysis and their effective use. The use of interactive methods in the teaching process is important in ensuring the active participation of students and strengthening their knowledge. This article provides detailed information about the importance of interactive methods, types and their practical application in teaching computer science.

Key words: informatics, interactive methods, knowledge, skills, communicative approach, modern technologies, project, group discussions.

INTRODUCTION

Interactive methods are pedagogical approaches that ensure active participation of students in the learning process. They give students the opportunity to express themselves, solve problems and work as a team. With the help of interactive methods, students have the opportunity to further develop themselves by applying their

knowledge in practice, acquiring new knowledge and exchanging ideas. Interactive methods are generally different from traditional teaching methods. In traditional methods, the teacher provides basic information during the lesson, while the students listen passively. Such an approach can reduce students' interest and lower the level of acquisition.

MATERIALS AND METHODS

Interactive methods ensure active participation of students and encourage them to strengthen their knowledge. Interactive methods used in teaching computer science can be different. These include group work, problem-based learning, project-based learning, role-playing, simulation, and other methods. Each method has its own advantages and areas of application.[1]

Group work is a method that encourages students to work together in small groups. This method develops students' teamwork skills and creates an opportunity to learn from each other.In computer science, through group work, students can work together to program, analyze data, or create a project. Problem-based learning is an approach that focuses students on solving real-life problems. Students try to identify, analyze, and find a solution to a problem. Through problem-based learning in computer science, students develop skills in writing code, creating algorithms, and solving problems during software development. Project-based learning is a method that allows students to work on a specific project. Students will have the opportunity to apply their knowledge in practice, to work as a team and to present the results within the framework of the project. Through project-based learning in computer science, students develop practical skills such as software development, database development, or website development. Role-playing is a method that allows students to put their knowledge into practice by taking on different roles. Pupils assume different roles in certain situations and interact with each other. Through computer science role-playing, students can simulate real-life situations by taking on roles such as a programmer, system administrator, or user. Simulation is a technique that allows students to replicate real-life processes or systems.[2]

Through simulation, students develop decision-making, problem-solving and outcome-analysis skills in specific situations. In computer science, students can study computer networks, software, or information systems using simulations.[3]

RESULTS AND DISCUSSIONS

There are several advantages of using interactive methods. These methods increase students' interest. When students have the opportunity to actively participate, their interest in learning increases and the level of mastery increases. Interactive methods develop students' independent thinking and problem-solving skills. Students are encouraged to apply their knowledge in practice and develop new ideas. Interactive methods develop teamwork skills. Students will have the opportunity to work together,

exchange ideas and learn from each other. This improves their communication skills and prepares them to work in a team. Fourth, interactive methods give students the opportunity to strengthen their knowledge and acquire new knowledge. Students put their knowledge into practice by completing various tasks, and as a result, their knowledge levels increase. Teachers should develop a number of strategies to implement interactive methods in teaching computer science. First, the teacher should take into account interactive methods when creating a lesson plan. It is necessary to think about what interactive methods to use in the lesson, what topics to include and what activities to organize to increase the interest of students. [4]

The teacher should organize various activities to ensure the active participation of students during the lesson. For example, group work, problem-based tasks, projects, and role-playing games can be used to engage students. Through these activities, students have the opportunity to apply their knowledge and learn from each other. The teacher should use interactive methods to evaluate the results of the students. A variety of assessment methods can be used to assess students' active participation and knowledge. These methods help to determine the level of mastery of students and determine their strengths and weaknesses. The teacher should encourage students to strengthen their knowledge using interactive methods. Students should use additional materials and resources to reinforce their knowledge outside of class. It is important that the teacher guides and supports the students in this process.[5]

CONCLUSION

The use of interactive methods in the teaching of computer science is important for strengthening students' knowledge, increasing their interest and developing teamwork skills. With the help of interactive methods, students have the opportunity to apply their knowledge in practice, solve problems and develop new ideas.By using interactive methods in practice, teachers can increase students' interest in learning and increase their level of knowledge. In the future, the role of interactive methods in the teaching of computer science is expected to increase. Along with the development of modern technologies and teaching methods, teachers have the opportunity to further expand interactive methods and further develop the knowledge of students. The use of interactive methods in the teaching process is important in increasing students' interest in learning and strengthening their knowledge.

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