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SOME ASPECTS OF THE USE OF INTERACTIVE TEACHING TOOLS IN COMPUTER SCIENCE CLASSES

Prokaziuk Roman
Applicant for the first level of higher education in the specialty of Secondary Education (Informatics)
Ternopil Volodymyr Hnatiuk National Pedagogical University
prokaziuk_rv@fizmat.tnpu.edu.ua
Skaskiv Hanna
Assistant of the Department of Informatics and Methods of its Teaching
Ternopil Volodymyr Hnatiuk National Pedagogical University
skaskig@tnpu.edu.ua

In today's educational environment, computer science as a subject plays a key role in developing digital literacy, logical thinking, and information technology skills. Given the rapid development of digital tools, interactive teaching aids are becoming not only desirable but also essential components of an effective computer science lesson. Their use stimulates students' cognitive activity, helps visualize complex concepts, and creates conditions for individualizing the learning process.

Interactive teaching tools cover a wide range of instruments, from multimedia presentations and educational platforms to virtual simulations, interactive whiteboards, and cloud services [2; 3]. In computer science lessons, they perform several important functions:

– Motivational – engaging students through gamification, visual effects, and feedback.

– Cognitive – promoting a deeper understanding of algorithms, data structures, and programming principles.

– Practical – creating conditions for modeling, testing, and independent design of digital products.

The use of interactive tools in computer science classes is one of the most effective ways to improve the quality of education. Thanks to visual materials, students have the opportunity to better understand complex concepts and deepen their knowledge of the subject using interactive technologies and other visualization tools. Interactive tools not only improve perception and assimilation of material, but also develop critical thinking, creativity, analytical skills, and even technical skills [1].

Studying computer science often involves working with abstract concepts such as algorithms, data structures, and programming, which can be difficult for students, especially beginners. Visualization helps simplify these complex topics, making them easier to understand. For example, animating algorithms can clearly show how a search or sorting algorithm works and what changes occur at each stage of its execution.

The use of diagrams and charts allows you to examine the logical structures of programs, the relationships between their elements, and visually explain concepts such as loops, conditions, and functions. This allows students to better understand how different components of a program interact with each other, as well as what the execution of a program looks like step by step.

Computer science lessons that actively use visual aids allow students to master programming skills more quickly. Thanks to interactive environments such as Scratch or

Blockly, students can create their own programs without having to write code, which is especially useful for the initial stage of learning. Visual programming languages provide convenient interfaces for creating algorithms, illustrating the basics of programming in a graphical form, which helps students better understand how different commands and functions work.

Such interactive simulations allow students to interact directly with the programming process, clearly see errors in the code, and correct them in real time. Thanks to this, students develop not only technical skills but also critical thinking, as they must find and correct errors that appear during the process.

Interactive teaching tools significantly increase students' motivation to study computer science. The use of animations, interactive simulations, games, and video lessons makes lessons more exciting and interesting. This approach allows students not only to perceive information, but also to actively interact with it, which increases their interest in learning.

Interactive visualization elements, such as videos with examples of real applications or application simulations that students can manipulate themselves, make the learning process more personalized. Each student can work at their own pace, allowing them to better absorb the material. In addition, interactive elements allow students to receive instant feedback, helping them to recognize their mistakes and correct them.

Visualization not only improves the assimilation of factual knowledge, but also promotes the development of critical thinking. With the help of infographics, diagrams, graphs, and other tools, students can independently analyze information, compare different approaches, identify patterns, and draw conclusions. For example, using graphs to analyze test results, students can compare different algorithms in terms of speed or efficiency and make decisions based on this data.

This gives students the opportunity to develop their analytical skills, as they learn to consider information from different perspectives and evaluate its significance. This approach helps them develop the ability to ask questions, argue their opinions, and verify them with factual data [3].

One of the main advantages of using interactive tools in computer science is the ability to create an interactive learning environment. Interactive simulations, videos, games, and other tools allow students to actively engage with the material, which increases their involvement and promotes a deeper understanding of the topic. Thanks to interactive technologies such as augmented and virtual reality, students can not only observe processes, but also participate in them, creating a more realistic and engaging experience.

Interactive lessons allow students to explore the subject in practice, make hypotheses, and test them in different scenarios. This allows them to develop not only technical but also creative skills, as students can apply their knowledge to create their own projects and solve real-world problems [1]. Visualization greatly improves the memorization process. Learning complex concepts such as data structures, algorithms, operating systems, or programming languages can be complicated by the large amount of information that is difficult to absorb without visual aids. The use of interactive tools helps to structure and organize knowledge, making it easier to memorize and assimilate.

The use of interactive tools helps improve communication among students, especially during group work or project assignments. With tools such as online whiteboards, shared documents, and video conferencing, students can visually present their ideas, create collaborative projects, and receive feedback from classmates and teachers. This process promotes the development of collaboration skills as students work together to create a visual model or presentation to solve a problem together.

In conclusion, the use of interactive tools in computer science classes has a huge number of advantages, ranging from improving understanding of complex topics and developing programming skills to stimulating creativity and critical thinking. This makes the learning process more dynamic, motivating, and effective.

Thus, interactive teaching tools in computer science classes are a powerful tool for implementing a competency-based approach. Their use allows for more effective learning, develops skills of cooperation, independence, and reflection, and creates conditions for differentiation and inclusivity in education.

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ІННОВАЦІЙНІ ТЕХНОЛОГІЇ РОЗВИТКУ ЕМОЦІЙНОГО ІНТЕЛЕКТУ У СИСТЕМІ ВУЗІВСЬКОЇ ПІДГОТОВКИ ФАХІВЦІВ

Андрійчук Іванна Петрівна
кандидат психологічних наук, завідувач кафедри психології розвитку та консультування
Тернопільський національний педагогічний університет імені Володимира Гнатюка
ivanna_andriychuk@tnpu.edu.ua

Андрійчук Соломія Юріївна
здобувачка першого рівня вищої освіти, спеціальність Середня освіта, (Англійська мова та зарубіжна література)
Тернопільський національний педагогічний університет імені Володимира Гнатюка
solomia2005y@gmail.com

Сучасні виклики суспільного розвитку вимагають від системи вищої освіти підготовки фахівців, здатних до ефективної комунікації, емоційної врівноваженості, толерантності та гнучкості мислення. В умовах глобалізації, війни, цифровізації та зростання рівня емоційного навантаження у професійній діяльності особливої значущості набуває розвиток емоційного інтелекту як складової професійної компетентності. Емоційний інтелект сприяє підвищенню якості міжособистісної взаємодії, здатності до емпатії, саморегуляції, ефективного вирішення конфліктів і професійного саморозвитку. Саме здатність усвідомлювати, розуміти та регулювати власні емоції, а також адекватно реагувати на емоційні стани інших визначає рівень професійної компетентності в багатьох галузях діяльності.

Мета дослідження – проаналізувати особливості застосування інноваційних технологій розвитку емоційного інтелекту у процесі професійної підготовки здобувачів вищої освіти.

Розвиток емоційного інтелекту у здобувачів вищої освіти є комплексним процесом, що передбачає поєднання когнітивних, емоційних і поведінкових