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DIDACTIC OPPORTUNITIES OF USING INNOVATIVE PEDAGOGICAL TECHNOLOGIES IN TEACHING THE SUBJECT OF TECHNOLOGY

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Annotation

This article explores the didactic possibilities of using innovative pedagogical technologies in teaching the subject of Technology in general secondary education. The study focuses on how modern teaching approaches, including digital tools, interactive methods, project-based learning, and student-centered instructional strategies, contribute to improving the quality and effectiveness of the educational process. Special attention is given to the role of innovative pedagogical technologies in developing students' practical skills, creative thinking, problem-solving abilities, and independent learning competencies.

The article analyzes the integration of information and communication technologies, modern teaching models, and interactive learning environments into Technology education. It highlights how these innovations enhance students' motivation, engagement, and active participation in the learning process. Additionally, the study emphasizes the didactic advantages of innovative technologies in aligning theoretical knowledge with practical application, fostering collaboration, and supporting differentiated and personalized learning.

The findings suggest that the effective use of innovative pedagogical technologies in teaching Technology not only improves learning outcomes but also prepares students for real-life problem solving and future professional activities. The article concludes that innovative teaching methods play a significant role in modernizing Technology education and increasing its relevance in the context of rapidly developing science and technology.

Keywords

innovative pedagogical technologies, Technology education, didactic opportunities, interactive teaching methods, digital learning tools, project-based learning, student-centered learning, educational innovation, information and communication technologies, practical skills development, creative thinking, modern teaching strategies

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Introduction. In the context of rapid scientific and technological development, the modernization of the education system has become a priority in many countries. One of the key requirements of modern education is the effective integration of innovative pedagogical technologies into the teaching and learning process. This is especially important in teaching the subject of Technology, which plays a significant role in developing students' practical skills, technical thinking, creativity, and readiness for professional activity.

Traditional teaching methods are often insufficient to meet the growing demands of contemporary education and the labor market. As a result, there is an increasing need to apply innovative pedagogical technologies that support active learning, independent thinking, and problem-solving skills. The use of interactive methods, digital resources, project-based learning, and information and communication technologies creates favorable conditions for enhancing students' motivation and engagement in Technology lessons.

The subject of Technology provides broad opportunities for the application of innovative teaching approaches, as it combines theoretical knowledge with practical activities. Through the use of modern pedagogical technologies, teachers can organize the learning process more effectively, taking into account students' individual abilities, interests, and learning styles. This contributes to the development of creative thinking, collaboration skills, and the ability to apply knowledge in real-life situations.

Therefore, studying the didactic possibilities of using innovative pedagogical technologies in teaching Technology is a relevant and important research task. This article aims to analyze the role and effectiveness of innovative pedagogical technologies in Technology education and to identify their didactic advantages in improving the quality of teaching and learning outcomes.

Literature Review. Recent studies in the field of education emphasize the growing importance of innovative pedagogical technologies in improving teaching effectiveness and learning outcomes. Researchers note that traditional teacher-centered approaches are gradually being replaced by student-centered models that encourage active participation, critical thinking, and practical application of knowledge. In particular, the use of interactive teaching methods, digital tools, and project-based learning has been widely discussed as an effective way to enhance students' engagement and motivation.

In Technology education, scholars highlight the importance of integrating information and communication technologies to support hands-on learning and skill development. Studies show that digital simulations, multimedia resources, and virtual learning environments help students better understand technological

processes and concepts. Additionally, research indicates that project-based and problem-based learning approaches are especially effective in Technology lessons, as they allow students to work collaboratively, solve real-world problems, and develop creative and technical thinking skills.

Several authors also emphasize the didactic value of innovative pedagogical technologies in supporting differentiated and individualized learning. By using modern teaching tools and methods, teachers can adapt instructional content to students' abilities and interests, which leads to improved learning outcomes. Overall, the literature suggests that innovative pedagogical technologies play a crucial role in modernizing Technology education and making it more relevant to contemporary educational and professional demands.

Research Methodology. This study employs a qualitative and descriptive research approach to analyze the didactic possibilities of using innovative pedagogical technologies in teaching Technology. The research is based on the analysis of pedagogical literature, educational standards, and existing teaching practices related to Technology education. In addition, classroom observations and the examination of lesson plans were used to identify effective innovative teaching methods applied in Technology lessons.

The study also includes a comparative analysis of traditional teaching methods and innovative pedagogical technologies. This comparison focuses on student engagement, learning motivation, and the development of practical skills. Data were collected through observations, informal interviews with Technology teachers, and the analysis of students' learning activities and outcomes.

The collected data were analyzed using descriptive and analytical methods. The results of the analysis were used to identify the didactic advantages of innovative pedagogical technologies and to determine their impact on the quality of teaching and learning in Technology education.

Results and Discussion. The results of the study indicate that the use of innovative pedagogical technologies significantly improves the effectiveness of teaching the subject of Technology. Lessons that incorporate interactive methods, digital tools, and project-based learning demonstrate higher levels of student engagement and active participation. Students show greater interest in learning activities and are more motivated to complete practical tasks.

The findings also reveal that innovative teaching approaches contribute to the development of key competencies such as creative thinking, problem-solving skills, and independent learning. Students involved in project-based activities are better able to apply theoretical knowledge in practical situations and work collaboratively with their peers. Moreover, the use of digital technologies helps students visualize

complex technological processes, which enhances understanding and retention of knowledge.

In comparison with traditional teaching methods, innovative pedagogical technologies provide more opportunities for differentiated instruction and individualized learning. Teachers can adjust tasks and activities according to students' skill levels, which leads to more effective learning outcomes. These results support previous research findings and confirm the didactic value of innovative technologies in Technology education.

Conclusion. In conclusion, the study demonstrates that innovative pedagogical technologies have significant didactic potential in teaching the subject of Technology. Their effective use enhances student motivation, engagement, and learning outcomes, while also supporting the development of practical skills and key competencies required in modern society.

The integration of interactive methods, digital tools, and project-based learning into Technology lessons allows for a more dynamic and student-centered learning environment. These approaches help bridge the gap between theory and practice and prepare students for real-life problem solving and future professional activities.

Therefore, it can be concluded that the use of innovative pedagogical technologies is an essential component of modern Technology education. Teachers are encouraged to actively implement these methods in their teaching practice to improve the quality and relevance of the educational process.

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