



DEVELOPMENT OF INFORMATION TECHNOLOGIES IN EDUCATION: FROM TRADITIONAL METHODS TO INNOVATIVE APPROACHES.

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Annotation

In recent decades, information technologies have significantly changed the education system, providing new opportunities to improve the quality of the educational process. The theory and practice of education have undergone significant changes, with the transition from traditional teaching methods to innovative approaches based on modern digital technologies.

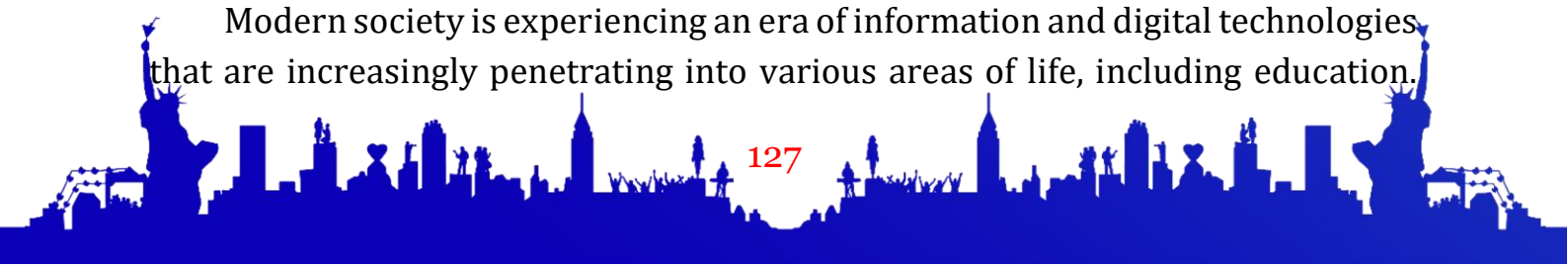
This work is aimed at analyzing the development of information technologies in the educational process, exploring their impact on traditional teaching methods and the possibilities of introducing new, more effective educational technologies. In particular, such aspects as the use of electronic educational resources, online learning, interactive platforms, as well as the role of mobile applications and virtual classrooms in increasing the availability and quality of education are considered.

Particular attention is paid to the processes of digital transformation in educational institutions, including the introduction of learning management systems (LMS), the development of blended learning and the use of virtual and augmented reality technologies. The impact of these technologies on student motivation, their activity and academic performance, as well as on the preparation of teachers to work with new digital tools is considered.

The aim of the work is to show how information technologies can be used to create a more flexible and effective educational environment that promotes individualization of the educational process and prepares students for the challenges of modern society.

Key words: Information Technologies in Education, Traditional Teaching Methods, Innovative Teaching Approaches, Blended Learning, E-Learning, Digital Natives and Digital Immigrants, Connectivism, Online Learning Platforms, Learning Management Systems (LMS), Gamification.

Modern society is experiencing an era of information and digital technologies that are increasingly penetrating into various areas of life, including education.





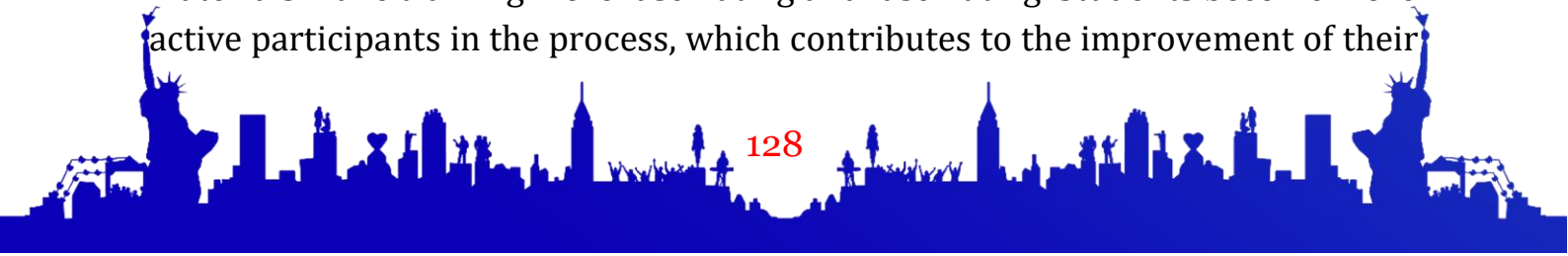
Technology and innovation change the educational process by providing new learning tools, improving the availability of knowledge and facilitating communication between students and teachers. In the conditions of the rapid development of technology, traditional learning methods are inferior to the place of new approaches based on the use of information technologies (IT). The purpose of this study is to analyze the role of IT in the educational process, as well as consider the transition from traditional learning methods to modern innovative approaches.

Traditional learning methods and restrictions Traditional learning methods include lectures, seminars, practical classes and the use of printed materials. Despite its effectiveness, these approaches have a number of restrictions, such as the lack of individualization of the educational process, the limited resources and difficulties in ensuring feedback between the teacher and the student. In the conditions of a rapidly changing world, these methods begin to lose their relevance, which leads to the need to introduce more flexible and modern technologies into educational practice.

The introduction of information technologies into the educational process information technology opens up new horizons for education. Among them, you can identify such tools as electronic educational resources, online courses, platforms for distance learning, mobile applications and learning management systems (LMS). These technologies provide the availability of training materials at any time and from any device, which significantly improves the quality of education. The introduction of online learning allows students to study in their pace, which contributes to the deeper development of the material and improving the performance.

Innovative approaches in education using IT: With the development of technology, new approaches are emerging, such as blended learning, which combines traditional methods with online learning. The introduction of virtual and augmented reality technologies allows for the creation of interactive learning environments where students can work with models, solve problems in real-life conditions, and apply theoretical knowledge in practice. In addition, the use of artificial intelligence in educational technologies helps analyze student progress, predict their results, and provide personalized recommendations.

The use of IT in the educational process significantly affects students motivation. Interactive elements, gamefice, access to a variety of multimedia materials make training more fascinating and fascinating. Students become more active participants in the process, which contributes to the improvement of their





academic performance. In addition, digital technologies help teachers effectively monitor students' progress and respond timely to their needs.

The introduction of information technologies requires teachers not only to use new tools, but also to develop the relevant skills. It is necessary to prepare teachers to work with digital technologies, teach them the basics of distance learning and create digital educational materials. Developing teachers' IT competencies is an important aspect of successful digitalization of education.

Information technologies significantly change approaches to learning and teaching, opening up new opportunities for students and teachers. The transition from traditional methods to innovative approaches helps create a more flexible, accessible and effective educational environment. In the future, information technologies will continue to play a key role in the educational system, helping to improve the quality of education and adapt it to modern requirements. It is important for teachers and students to actively master new technologies, which will allow them to be used in the educational process as effectively as possible.

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