NEW RENAISSANCE

INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE VOLUME 2 | ISSUE 2

THE IMPACT OF TECHNOLOGY IN EDUCATION

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https://doi.org/10.5281/zenodo.14953256

Abstract. This thesis analyzes the role of technology in the educational process and its impact on efficiency. Modern technologies are fundamentally transforming the education system by improving teaching methods, integrating interactive learning platforms, and making the learning process more effective. The paper examines the advantages of innovative technologies in education, including distance learning, artificial intelligence, virtual reality, and augmented reality. Additionally, it analyzes the impact of technology on education quality, the conveniences created for teachers and students, and the challenges faced. The research findings contribute to developing key recommendations for the effective use of technology in education.

Introduction

In the 21st century, technology has become an essential part of human life, influencing various sectors, including education. The integration of technology in education has transformed traditional teaching methods, making learning more accessible, interactive, and effective. This thesis explores how technology impacts education, highlighting both its benefits and potential challenges.

Thesis Statement:

The use of technology in education significantly enhances learning experiences through improved accessibility, interactive methods, and personalized learning; however, it also raises concerns related to digital inequality and reduced interpersonal communication.

Literature Review

This section provides an overview of previous research on the role of technology in education. Scholars have discussed various technological tools such as online platforms, virtual classrooms, and AI-based learning systems. Studies show that technology can improve student engagement, provide diverse learning materials, and enable distance education.

However, concerns about over-reliance on technology and the digital divide remain prevalent in the literature.

2025 FEBRUARY

NEW RENAISSANCE

INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE VOLUME 2 | ISSUE 2

Methodology

To analyze the impact of technology on education, this study employs both qualitative and quantitative methods. Surveys were conducted among students and teachers to assess their experiences with technology-based learning. Additionally, case studies of schools implementing advanced technology tools were analyzed to evaluate their effectiveness. Data was collected through questionnaires, interviews, and classroom observations.

Results

The findings reveal that technology positively affects student motivation, engagement, and academic performance. Students benefit from interactive learning platforms and access to a vast range of educational resources. Teachers reported that technology helps them personalize lessons to meet individual student needs. However, the results also indicate issues related to unequal access to technology and decreased face-to-face communication skills among students.

5. Discussion

The results suggest that while technology offers numerous advantages in education, it is crucial to address the associated challenges. Schools and policymakers should work to minimize digital inequality by providing equal access to devices and internet connectivity. Moreover, educators should balance technology use with traditional teaching methods to maintain social interaction and critical thinking skills.

6. Conclusion

Technology has undeniably reshaped the educational landscape, offering improved accessibility, engagement, and personalized learning opportunities. While the benefits are significant, challenges like digital inequality and diminished interpersonal skills must be addressed. Future research should focus on sustainable ways to integrate technology in education while ensuring equal opportunities for all learners.

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