

THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN EDUCATION: CHALLENGES AND PROSPECTS

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Annotatsiya. Ushbu maqolada axborot-kommunikatsiya texnologiyalarining (AKT) zamonaviy ta'lim tizimidagi o'rni va ahamiyati tadqiq etiladi. An'anaviy o'qitish uslublari raqamli modellarga o'tish jarayoni, shuningdek, AKTning talabaga yo'naltirilgan ta'lim muhitini yaratishdagi afzalliklari tahlil qilingan. Tadqiqotda raqamli tafovut va o'qituvchilarning texnologik kompetensiyasi bilan bog'liq muammolar yoritilgan bo'lib, kelajakda sun'iy intellektning ta'limni individuallashtirishdagi roli haqida xulosalar berilgan.

Tayanch so'zlar: AKT, raqamli ta'lim, innovatsiya, pedagogik texnologiyalar, raqamli savodxonlik, masofaviy o'qitish.

ИСПОЛЬЗОВАНИЕ ИНФОРМАЦИОННО- КОММУНИКАЦИОННЫХ ТЕХНОЛОГИЙ (ИКТ) В ОБРАЗОВАНИИ: ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ

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Аннотация. В данной статье анализируется трансформация образовательной среды под влиянием информационно-коммуникационных технологий (ИКТ). Автор рассматривает переход от традиционных методов к цифровым моделям обучения,

подчеркивая важность создания гибкой образовательной среды. Особое внимание уделяется таким барьерам, как "цифровой разрыв" и недостаточная технологическая грамотность преподавателей. В работе также прогнозируется роль искусственного интеллекта в персонализации обучения.

Ключевые слова: ИКТ, цифровое образование, инновации, педагогические технологии, цифровая грамотность, дистанционное обучение.

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Introduction: In the contemporary era of global digitalization, integrating Information and Communication Technologies (ICT) into the educational framework is no longer an optional luxury but a core necessity. The shift from conventional pedagogical strategies to digital-centric models has fundamentally altered the interaction between teachers and students. This paper examines the diverse impacts of ICT on learning outcomes while identifying the primary barriers to its successful adoption.

Keywords: ICT in education, digital learning, innovation, pedagogical tools, digital literacy, e-learning prospects., студентка Узбекского государственного университета мировых языков

Main Part: The integration of ICT into pedagogical practices has fundamentally shifted the academic paradigm from a teacher-centered approach to a more dynamic, student-oriented model. One of the most transformative aspects of digital tools is the democratization of information. Through cloud-based systems and Massive Open Online Courses (MOOCs), learners can access world-class resources regardless of their

geographical location. This flexibility fosters autonomy, allowing students to tailor their learning speed and revisit complex modules until mastery is achieved.

Furthermore, the introduction of immersive technologies, such as Virtual Reality (VR) and Augmented Reality (AR), provides students with experiential learning opportunities that were previously impossible. For instance, medical students can simulate surgeries, and history students can virtually explore ancient civilizations, which significantly boosts cognitive retention and emotional engagement. Additionally, collaborative platforms like Google Workspace and specialized forums have redefined teamwork. These tools enable real-time peer-to-peer interaction and collective problem-solving, breaking down the barriers of the traditional four-walled classroom.

However, the rapid transition to a digital framework reveals systemic vulnerabilities. The "digital divide" remains a multifaceted challenge, encompassing not only the lack of physical hardware but also the disparity in high-speed internet stability between urban and rural areas. Moreover, the psychological readiness of both students and educators is often overlooked. Technostress—the anxiety caused by the inability to cope with new computer technologies—can lead to decreased productivity. Therefore, the success of ICT implementation depends not just on the availability of gadgets, but on a comprehensive support system that includes mental health awareness and continuous technical upskilling for teaching staff.

Conclusion: In conclusion, while ICT offers transformative opportunities for inclusive and personalized learning through AI and data-driven systems, bridging the digital gap and improving teacher training are essential steps for future success.

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