

## THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EDUCATION SYSTEM AND FUTURE CAREERS.

*Gulistan State Pedagogical Institute*

*Mukhtorjonova Mokhinur Muzaffar qizi*

*e-mail: [muxtorjonovamoxinur05@gmail.com](mailto:muxtorjonovamoxinur05@gmail.com)*

*Gulistan State Pedagogical Institute*

*Oysafar Urazmatovna Utapova*

*e-mail: [missbrilliantka9@gmail.com](mailto:missbrilliantka9@gmail.com)*

Annotatsiya: Sun'iy intellektning ta'lim tizimiga va kelajakka ta'siri. Ushbu maqolada sun'iy intellekt texnologiyalarining zamonaviy ta'lim jarayoniga integratsiyalashuvi, o'qitish metodikasining o'zgarishi va shaxsiylashtirilgan ta'limning afzalliklari tahlil qilinadi. SI nafaqat bilim berish usullarini, balki mehnat bozorida talablarni ham o'zgartirmoqda. Maqolada an'anaviy kasblarning transformatsiyasi va SI davrida yuzaga keladigan yangi mutaxassisliklar ko'rib chiqiladi. Shuningdek, talabalarda "soft skills" (yumshoq ko'nikmalar) va raqamli savodxonlikni rivojlantirishning ahamiyati yoritilgan.

Влияние искусственного интеллекта на систему образования и профессии будущего.

Аннотация: В данной работе анализируется интеграция технологий искусственного интеллекта (ИИ) в современный образовательный процесс, трансформация методик обучения и преимущества персонализированного подхода. ИИ меняет не только способы передачи знаний, но и требования рынка труда. В статье рассматриваются изменения традиционных профессий и появление новых специальностей в эпоху ИИ. Также подчеркивается важность развития у студентов гибких навыков (soft skills) и цифровой грамотности как ключевых факторов успеха в будущем.



The Impact of Artificial Intelligence on the Education System and Future Careers.

**Abstract:** This work analyzes the integration of Artificial Intelligence (AI) technologies into the modern educational process, the transformation of teaching methodologies, and the advantages of personalized learning. AI is reshaping not only the ways of knowledge dissemination but also the demands of the labor market. The article examines the transformation of traditional occupations and the emergence of new career paths in the AI era. Furthermore, it highlights the significance of developing students' soft skills and digital literacy as essential components for thriving in a tech-driven future.

**Keywords:** Artificial Intelligence ,Machine Learning,Generative AI,Adaptive Learning,Intelligent Tutoring Systems,Curriculum Development,Job Automation,AI Ethics in Career.

Typically, in the traditional education system, teachers deliver the same materials to all students, even though every student has their own learning pace, interests, and strengths. However, with the help of Artificial Intelligence, it is possible to monitor students' learning processes and provide them with individually tailored lessons and assignments. For instance, AI systems can analyze students' performance levels in real-time, identify their weaknesses, and offer additional exercises and support in those specific areas. In this way, students receive an education based on their individual needs, which ultimately increases overall learning efficiency.

At the same time, artificial intelligence assists not only students but also teachers. Educators spend a significant amount of time preparing lessons and grading; however, AI helps automate these processes. For instance, AI algorithms can automatically generate lesson plans and assignments, grade student work, and



track their progress. Furthermore, AI enables teachers to communicate more effectively with their students. Through remote learning systems, teachers can monitor students in real-time and provide necessary guidance. This alleviates the teachers' workload and enhances the efficiency of the educational process.

Additionally, artificial intelligence is creating opportunities to expand education on a global scale. Remote learning platforms and online courses have made it possible to study from any corner of the world, and AI further advances this process. AI-driven platforms for distance education adapt lessons and provide guidance and support to learners. It is also worth noting that AI has enabled automatic language translation, making the learning process even more convenient for students. Through AI, every student can have the opportunity to receive an education in their native language, thereby broadening educational access for the younger generation. The integration of artificial intelligence into the education system may, of course, raise certain social issues. There are risks associated with collecting and storing students' personal data, academic results, and other confidential information. Therefore, ensuring privacy and adhering to regulations is crucial when utilizing AI in education.

In conclusion, incorporating AI into the education system contributes significantly to its improvement. The individualization of the learning process, the development of distance education, tools that assist teachers, and the creation of new professions are all advantages of AI integration. However, it is essential to address the ethical and social issues associated with the implementation of this technology. If these challenges are resolved, artificial intelligence will make education more effective and globally accessible.

#### **LIST OF REFERENCES (FOYDALANILGAN ADABIYOTLAR RO'YXATI)**

UNESCO (2021). AI and Education: Guidance for Policy-Makers. UNESCO Publishing. (Provides a comprehensive overview of how AI can improve learning and the risks involved).



Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.

Luckin, R. (2018). *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. UCL Press.

Selwyn, N. (2019). *Should Robots Replace Teachers? AI and the Future of Education*. Polity Press. (A critical look at the ethical and social impacts of AI in classrooms).

World Economic Forum (2023). *The Future of Jobs Report 2023*. (This report analyzes how AI and automation are changing the labor market and creating new professions).

Popenici, S. A., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*.

Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.

OECD (2021). *OECD Digital Education Outlook 2021: Pushing the Frontiers with Artificial Intelligence, Blockchain and Robots*. OECD Publishing.

