

EFFECTIVE USAGE OF ARTIFICIAL INTELLIGENCE IN EDUCATION

Usmonov Mardonbek

Annotation: This article discusses the types of artificial intelligence, importance and usage of them in the field of education. In addition, the potential benefits and risks of AI in education, including personalized learning, improved assessment, reduced planning time for teachers, and the risk of fraud are also included. Drawing on a variety of studies and perspectives, the paper argues that while AI carries biological risks, its educational benefits are significant. The paper concludes by suggesting that more empirical research is needed on the impact of AI in education and the importance of preparing students for a future in which machines will play a leading role.

Аннотация: в статье рассматриваются виды искусственного интеллекта, значение и использование их в сфере образования. Кроме того, также включены потенциальные преимущества и риски AI в образовании, включая персонализированное обучение, улучшенную оценку, сокращение времени планирования для учителей и риск мошенничества. Опираясь на различные исследования и точки зрения, в статье утверждается, что, хотя ИИ несет биологические риски, его образовательная польза значительна. В заключение в документе высказывается предположение, что необходимы дополнительные эмпирические исследования влияния ИИ на образование и важности подготовки студентов к будущему, в котором машины будут играть ведущую роль.

Annotatsiya: Maqolada sun'iy intellekt turlari, ularning ta'lim sohasida ahamiyati va qo'llanilishi muhokama qilinadi. Bundan tashqari, AI ning ta'limdagi potentsial afzalliklari va xavflari, jumladan, shaxsiylashtirilgan o'rganish, yaxshilangan baholash, o'qituvchilar uchun rejalashtirish vaqtini qisqartirish va firibgarlik xavfi ham kiritilgan. Turli tadqiqotlar va istiqbollarga tayangan holda, maqolada AI biologik xavf tug'dirsada, uning ta'lim foydasi katta ekanligini ta'kidlaydi. Maqolaning yakunida sun'iy intellektning ta'limga ta'siri va o'quvchilarni kelajakka tayyorlashda yetakchi ro'l o'ynashi ta'kidlanadi.

Keywords: technology, AI, methods, techniques, innovative teaching, improvements, device.

Ключевые слова: технология, ИИ, методы, методики, инновационное обучение, усовершенствования, устройство.

Kalit so'zlar: texnologiya, AI, metodikalar, texnikalar, innovatsion o'qitish, rivojlanishlar, qurilma.

Introduction

On a current basis, in everywhere computer technologies as well as Artificial Intelligence are becoming common and everyone is trying to utilize them for every field like education, work, business and so on. AI can create various opportunities for

everyone. For instance, it can generate images that you describe, help with assignments, chat with people, answers every single question that people give.

Education is changing rapidly, driven by technological advances. With the integration of robotic assistants, smart classrooms, and personalized learning systems, teachers are now better equipped to meet the diverse needs of students. This article explores the various technologies that are transforming education, including assistive robots, personalized learning, simulation tools, and more.

Assistive robots have become increasingly common in educational settings. These robots can perform a variety of functions, such as administrative tasks, teaching, and providing personalized feedback to students. For example, robot teachers can teach in a way that engages students through interactive learning. They can adapt their teaching style based on individual student responses, ensuring that each student receives the support they need.

Smart Classrooms in Schools Smart classrooms use advanced technology to enhance the learning experience. Equipped with interactive whiteboards, tablets, and other digital tools, these environments encourage collaboration and active participation. Smart Classrooms also include data analytics to track student progress and engagement, allowing teachers to make informed decisions about teaching strategies.

Personalized Education Personalized education focuses on tailoring instruction to the unique needs of each student. This approach takes into account students' interests, abilities, and learning styles, allowing for a more personalized learning experience. Technologies such as adaptive learning platforms can analyze student performance and adjust content accordingly, ensuring that each student progresses at their own pace.

Simulation tools provide immersive learning experiences that allow students to practice real-world skills in a controlled environment. From virtual labs for science experiments to historical simulations for social studies, these tools help students engage with complex concepts and develop critical thinking skills.

Scenario-based learning involves exposing students to real-world situations that require problem-solving and decision-making skills. Case systems allow teachers to create relevant scenarios that challenge students to apply their knowledge in real-world contexts, fostering deeper understanding and retention of information.

To effectively individualize instruction, teachers must understand the interests, abilities, and needs of their students. Analytical systems can assess these factors through surveys and assessments, providing valuable information that informs instructional design and supports student engagement.

Career choice is an important aspect of education and career guidance systems play a vital role in helping students identify possible career paths. These systems assess students' abilities, interests, and values to recommend appropriate career options, ultimately leading to a successful career.

Attendance programs have evolved from traditional phones to automated systems using biometrics or mobile apps. These tools simplify attendance tracking, allowing teachers to focus more on teaching rather than administrative tasks.

Unmanned systems such as drones and robotic vehicles are being integrated into educational programs to provide hands-on learning experiences in fields such as engineering and environmental sciences. Students can learn more about technology by participating in projects that promote teamwork and innovation. Learning discovery systems

To effectively measure student progress, learning outcomes systems analyze performance data to determine levels of understanding. These systems help teachers tailor their instruction based on individual student needs and ensure that learning goals are met.

Personalized learning tools allow teachers to create customized lesson plans and resources that meet the needs of their students. These tools often include digital content libraries, lesson planning software, and assessment tools that facilitate differentiated instruction.

Attention and distraction analysis systems use technology to monitor student engagement during lessons. By collecting data on student focus levels, teachers can adjust their teaching methods to maintain attention and improve learning outcomes.

These systems analyze student performance data to identify areas for improvement. By providing actionable suggestions for academic success, they help both teachers and students achieve better results.

Cloud-based learning systems provide flexibility and accessibility for both students and educators. These platforms enable collaborative learning experiences and provide access to resources from anywhere, fostering an inclusive learning environment.

Curriculum editing systems allow educators to easily modify and adapt course materials. This flexibility ensures that content remains current and aligned with educational standards while meeting the diverse needs of students.

Data-driven insights into student learning patterns enable educators to identify trends in performance and engagement. These systems help inform instructional practices and support targeted interventions for struggling students.

Although it has many beneficial sides, it has disadvantages and challenges also. For example, access to technologies may create many challenges for students who live in underprivileged areas or come from poor backgrounds. It may create inequalities and results leaving these students behind. These technologies work well and schools can get great benefit from them but they create a gap between in educational quality.

Another disadvantage is privacy. While using AI people download personal information. As a result of this, it improves the risk of cyber attack and creates concerns on privacy.

By spreading Artificial Intelligence many jobs may disappear in an upcoming future. Robots may replace with human beings. As a consequence of this, unemployment rate will increase.

In addition to that, students as well as teacher will be lazy. They won't have willing to learn or research something new. They can do only clicking buttons or only asking from ChatGPT .

Cheating might increase because of AI. Since, student might search from various sites and they copy and paste on their document. Even there are so many sites that can generate presentations or write essays, articles and so on. It might cause the increasing number of dishonesty and unfairness among students.

Conclusion

AI is rapidly developing in the field of education and effects its impacts for both teachers and learners. It is providing variety opportunities to improve learning and teaching. Artificial Intelligence has a great future. People can do and create great things by the help of it.

References:

1. Alam, Ashraf. "Should robots replace teachers? Mobilisation of AI and learning analytics in education." In 2021 International Conference on Advances in Computing, Communication, and Control (ICAC3), pp. 1-12. IEEE, 2021
2. Abdelsalam, U. M. (2014, March). A proposal model of developing intelligent tutoring systems based on mastery learning. Paper presented the Third International Conference on E-Learning in Education (pp. 106–118). Retrieved from <http://paper.researchbib.com/view/paper/14102>
3. Goksel, N., & Bozkurt, A. (2019). Artificial intelligence in education: current insights and future perspectives. In S. Sisman-Ugur & G. Kurubacak (Eds.), *Handbook of Research on Learning in the Age of Transhumanism* (pp. 224–236). Hershey, PA: IGI Global
4. Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26(2), pp. 582–599.
5. Gocen, Ahmet, and Fatih Aydemir. "Artificial intelligence in education and schools." *Research on Education and Media* 12, no. 1 (2021): 13-21.