

PAPER

THE ROLE OF ARTIFICIAL INTELLIGENCE IN EDUCATION: OPPORTUNITIES AND CHALLENGES

Yuldosheva Aziza Obod kizi^{1,*}

¹Student at the Faculty of Foreign Philology, Urgench State University named after Abu Rayhan Biruni

* yoldoshevaaziza665@gmail.com

Abstract

The use of artificial intelligence in modern education brings significant opportunities as well as various challenges. This article analyzes data based on recent studies and examines how the future development of artificial intelligence may address existing shortcomings through surveys conducted among university students. In addition, the article highlights the promising future of artificial intelligence in education and discusses its effective use in further developing the educational environment. The purpose of this article is to identify the advantages and disadvantages of artificial intelligence in the educational process based on the opinions of university students and to determine ways to use it more effectively in the future.

Key words: Artificial intelligence, technology, education, opportunities, challenges, language.

Introduction

In today's modern world, the role of technology in education is significantly important. Especially, artificial intelligence is developing day by day, and its application in educational processes brings great opportunities to students. For example, various interactive exercises and language learning processes are becoming easier and more effective. However, at the same time, it also causes some problems and shortcomings. For instance, the lack of data protection in artificial intelligence and the shortage of some resources are explored. The role of

artificial intelligence in education, its opportunities and challenges, is discussed based on recent research, studies, and experiences. Additionally, it discusses reflections on how artificial intelligence can be made more convenient for students and more effective for education in the future.

Literature review

Shokirov (2025) noted that the integration of artificial intelligence tools in the field of English language teaching presents both new opportunities and challenges. One can learn English grammar

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and write essays using the advantages of artificial intelligence. There is even the possibility to correct mispronunciations with it. Additionally, it is possible to learn vocabulary according to the level. However, at the same time, excessive use of artificial intelligence reduces the student's independent thinking and diminishes creativity. In short, the student becomes solely dependent on artificial intelligence when learning the language.

Zaripov (2024) noted that ChatGPT is useful as an assistant for correct grammar, pronunciation, and stylistic errors. Even AI can help writers become more aware of their mistakes and also improve their writing skills. Furthermore, AI can also provide an indication of the quality of written work, something that could be seen as an opportunity for those preparing for exams. Consequently, a reduction in student creativity can result in a complete reliance on artificial intelligence.

Assuming that Toshboltayev (2025) expressed the following views in his article, "New generation artificial intelligence systems can determine the mental state of students from their facial expressions, tone of voice, and body movement" (p. 607). The development of AI is beneficial not only for students but also for teachers. For example, it can automatically create lesson plans and generate exam questions. This, in turn, allows teachers to dedicate more time to individual work with students.

The methodology

The methodology of this article is based on questions. The main aim is to explore these questions and reveal students' attitudes towards artificial intelligence, as well as the result of this survey will contribute to the further development of artificial intelligence in the future. The questions were conducted among university students because nowadays students widely use artificial intelligence during their studies. These questions aim to address the issues and challenges that interest them or cause difficulties.

Results

According to the results of the survey conducted among university students, participants actively use artificial intelligence and highly appreciate its convenience. In response to the question, "I often

use artificial intelligence," 60% of respondents gave a positive answer. This indicates that the role of artificial intelligence in our daily lives is steadily increasing.

In addition, 50–70% of respondents agreed with the statement that artificial intelligence makes studying and work processes easier. However, in some questions, medium or low response rates were also observed. For example, 46.7% of participants stated that they sometimes face difficulties while using artificial intelligence. This result shows that users may not yet have sufficient skills to use the technology effectively.

Overall, based on the survey results, the number of artificial intelligence users is increasing day by day. Participants expressed a high level of trust in AI technologies. At the same time, certain concerns regarding safety and other limitations of artificial intelligence were mentioned. This indicates that artificial intelligence still needs further development in the future. Only then will it become even more beneficial.

Conclusion

Based on the results of this survey, it can be concluded that the use of artificial intelligence in the educational process not only saves time but also develops students' independent learning skills. During the survey, several drawbacks were identified; in particular, excessive reliance on artificial intelligence among young people may lead to a decline in their thinking processes. Therefore, these findings highlight the importance of maintaining balance and developing the skills necessary to properly integrate and direct artificial intelligence within the educational process.

References

1. Shokirov, S. S. (2025, May 7). Sun'iy intellektning inson hayotidagi o'rni. In International Educators Conference (E-Conf Series).
2. Zaripov, K. A. (2024). Role of artificial intelligence in teaching English. *Eurasian Journal of Technology and Innovation*, 2(5), 114–120.
3. Qosimjonova, D. H., & Toshboltayev, F. O.

- (2025). Artificial intelligence: Its importance in daily life and business. *Ustozlar uchun ilmiy jurnal*, 69(1), 286–289.
4. Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign.
 5. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education.
 6. OECD. (2021). *Artificial intelligence in education: Challenges and opportunities*. OECD Publishing.
 7. UNESCO. (2019). *Artificial intelligence in education: Guidance for policy-makers*. UNESCO Publishing.