

Торайғыров университетінің
ҒЫЛЫМИ ЖУРНАЛЫ

НАУЧНЫЙ ЖУРНАЛ
Торайғыров университета

ТОРАЙҒЫРОВ УНИВЕРСИТЕТІНІҢ ХАБАРШЫСЫ

Педагогикалық сериясы
1997 жылдан бастап шығады



ВЕСТНИК ТОРАЙҒЫРОВ УНИВЕРСИТЕТА

Педагогическая серия
Издается с 1997 года

ISSN 2710-2661

№ 3 (2025)

Павлодар

НАУЧНЫЙ ЖУРНАЛ
Торайгыров университета

Педагогическая серия
выходит 4 раза в год

СВИДЕТЕЛЬСТВО

о постановке на переучет периодического печатного издания,
информационного агентства и сетевого издания

№ KZ03VPY00029269

выдано

Министерством информации и коммуникаций
Республики Казахстан

Тематическая направленность

публикация материалов в области педагогики,
психологии и методики преподавания

Подписной индекс – 76137

<https://doi.org10.48081/JWNE6227>

Бас редакторы – главный редактор

Аубакирова Р. Ж.

д.п.н. РФ, к.п.н. РК, профессор

Заместитель главного редактора

Жуматаева Е., *д.п.н., профессор*

Ответственный секретарь

Каббасова А. Т., *PhD доктор*

Редакция алқасы – Редакционная коллегия

Мағауова А. С.,

д.п.н., профессор

Бекмағамбетова Р. К.,

д.п.н., профессор

Самекин А. С.,

доктор PhD, ассоц. профессор

Син Куэн Фунг Кеннет,

д.п.н., профессор (Китай)

Желвис Римантас,

д.п.н., к.псих.н., профессор (Литва)

Авагян А. В.,

д.п.н., ассоц. профессор (Армения)

Томас Чех,

д.п.н., доцент п.н. (Чешская Республика)

Шокубаева З. Ж.,

технический редактор

За достоверность материалов и рекламы ответственность несут авторы и рекламодатели

Редакция оставляет за собой право на отклонение материалов

При использовании материалов журнала ссылка на «Вестник Торайгыров университета» обязательна

**БІЛІМ БЕРУДІҢ ЗАМАНАУИ ТЕХНОЛОГИЯЛАРЫ,
ІТ-ТЕХНОЛОГИЯЛАР**

SRSTI 14.35.09

<https://doi.org/10.48081/ZRLD9207>***G. N. Akbayeva¹, N. Ramashov²**¹Karaganda Buketov University,
Republic of Kazakhstan, Karaganda;²O. Zhanibekov South Kazakhstan Pedagogical University,
Republic of Kazakhstan, Shymkent¹ORCID: <https://orcid.org/0000-0002-0314-0944>²ORCID: <https://orcid.org/0009-0009-9681-0561>*e-mail: rgul.ksu@mail.ru**THE ROLE OF ARTIFICIAL INTELLIGENCE
IN EDUCATIONAL PROCESS OF UNIVERSITY**

This article focuses on the impact of artificial intelligence (AI) on education, training, and corporate operations, exploring its role in higher education. The evolution of AI in education began in the 1960s, and important milestones were achieved, such as the development of early educational chatbots such as the Eliza and Scholar programs. Artificial intelligence technology has undergone limited development, but its recent growth has caused excitement and concern in the educational environment, especially after the global pandemic. A sociological study of students, professors, and administrators on the current use of artificial intelligence reveals a generally positive attitude, especially toward content creation and information evaluation. However, concerns remain about data privacy, security, and the potential for reduced teacher-student interaction. Despite the growing presence of artificial intelligence, most respondents believe that it should be supported rather than replaced by traditional learning methods. This article highlights the need to balance the potential of artificial intelligence with ethical considerations, such as preventing algorithmic bias, to improve data protection and the quality of education.

Keywords: artificial intelligence, educational process, artificial intelligence integration, ethical approaches, trends, data privacy, quality of education, perspectives.

Introduction

The rapidly developing labor market requires students to acquire new knowledge and skills to ensure employment opportunities. The University, a leading educational institution in the field of education, research and technology transfer in the region, is aware of its potential to integrate AI-based solutions into higher education. Current changes in the education system are focused on the development of new programs, the introduction of innovative teaching and learning methods, as well as the creation of educational technologies and content based on artificial intelligence. Artificial intelligence is becoming more widely used in schools as an educational tool, and its adoption in academic institutions is expected to grow. Although defining AI can be challenging, it generally encompasses machine perception, reasoning, and actions that emulate human intelligence.

There is ubiquitous acceptance of Intelligent Tutoring Systems and other AI technologies in educational establishments, albeit with inconsistencies and discipline-specific particulars. Public awareness is poised to foster quicker advancements in AI technologies. For over three decades, academic researchers have explored the potential applicability of AI in education [2; 3]. Nevertheless, there is still a limited comprehension of the educational possibilities embedded in AI technologies. An AIED system usually encompasses an artificial intelligence component either designed or specifically employed in a pedagogical context. There is a tendency to scrutinize every AIED system rather than solely the artificial intelligence component, with recent efforts to classify AIED systems based on pedagogical and scientific technologies. Characterizing and categorizing educational AI systems with structuring publicized systems is rather daunting. Artificial intelligence system development within postsecondary learning environments centers around ethical and legal issues. Establishing limits on artificial intelligence system development will counteract disorientation and a critical understanding of abilities, possibilities, and perspectives.

Here, in our opinion, it is necessary to make a small historical digression into the history of the emergence and implementation of AI in the educational process as a whole.

Generative artificial intelligence has recently garnered significant attention and popularity with widespread use. Individuals and organizations have begun investigating the possibilities of generative artificial intelligence to enhance productivity and product quality. The education sector is no exception with these explorations. However, it is essential to note that the adoption of artificial intelligence in education does not have a recent onset. On the contrary, it has been widely studied since the 1960s, with a continuing focus on educating and training artificial intelligence systems [4]. This white paper marks the first of four articles that seek to clarify the role of artificial intelligence in education. The first article provides a broad overview of the topic, with an emphasis on generative artificial intelligence and more recent developments. The three subsequent

articles will explore the implications of artificial intelligence for education, educators, and students.

Artificial intelligence in education has its beginning in earlier milestones. In 1964, Joseph Weizenbaum created «Eliza», a simple chatbot able to converse with humans and simulate a psychotherapist's role. «Eliza» is regarded as the first educational chatbot in history. In the late 1960s, Jaime Carbonell developed «Scholar», an innovative program that could automatically answer questions made in natural language about South American geography and evaluate students' responses. These projects were so pioneering that, in the mid-1970s, the existence of artificial intelligence as a field was enough for several scholars to devote themselves to its educational applications. At that time, strategies were already being devised to use artificial intelligence for tutoring [5]. The initial enthusiasm dried up in the first wave of disappointment regarding artificial intelligence's capabilities, which came to be known as the «AI winter», and was followed by artificial intelligence's re-emergence in the 1990s as an industry. The second artificial intelligence winter in education came in the late 1990s. After that, the educational research community started to again investigate possibilities for the incorporation of artificial intelligence technologies in educational applications.

This is evidenced by a huge amount of research in the field of AI.

Bates et al. explored various topics that assist researchers in addressing specific questions related to AI in higher education [6]. These work include the pedagogical implications of AI for teaching and learning, the effectiveness of AI applications in education, the impact of AI on assessment, the potential of AI technologies to enhance teaching and learning, AI's effect on the role of human teachers, social and ethical concerns, the costs and benefits of AI use, and its influence on the management and administration of teaching and learning in higher education.

Chatterjee and Bhattacharjee discussed the rise and use of AI in Indian higher education, presenting both opportunities and challenges. According to the authors, AI will bring significant changes to the management of India's higher education institutions. The application of AI is seen as a way to improve teaching, student learning, and decision-making processes. The study emphasizes the increased workload due to the rapid growth of higher education and addresses the importance of implementing AI in this context. The researchers employed various theories and models, including the «Unified Theory of Technology Adoption and Use» (UTAUT), to explore how stakeholders can successfully introduce AI into higher education. The study concluded that the UTAUT model could help speed up AI adoption in the sector [7].

Zawacki-Richter et al. conducted a systematic review of AI applications in higher education. They identified four key areas: academic support services, institutional and administrative services, assessment and evaluation, adaptive systems and personalization, and intelligent tutoring systems. Their findings highlight the lack of

critical reflection on the challenges and risks of AI in education, the weak connection to theoretical pedagogical frameworks, and the need for further investigation into ethical and educational considerations in the use of AI in higher education [8].

Thus, all analyzed works highlighted the significance of rational and competent implementation of artificial intelligence in the educational process of the university.

Materials and methods

This study was based on a comprehensive review of the existing scientific literature, analysis and generalization of pedagogical experience; survey methods (interview, questionnaire, interviewing); observation. The type of research is descriptive where a survey method is used to collect data. The questionnaire consisting of nine close-ended and one open-ended question are used to collect data regarding the use of artificial intelligence programs and websites in education.

Results and discussion

The educational landscape has radically changed in the wake of the global pandemic. The world, however, was not prepared for such a transition. Many people believe that the pandemic has led to an increase in online teaching and learning. The use of digital online education was relatively low prior to the pandemic, but at the time of the pandemic, online teaching and learning became fundamental. Teachers and students transitioned from face-to-face (traditional) teaching-learning systems to an online system. Now that the pandemic has subdued, educational institutions are looking for a blended approach, a mix of traditional and digital online education. Many students are interested in learning and attending classes online [9]. Because of the flexibility of attending classes anywhere around the globe, many take this opportunity to learn online from prestigious institutions. But the educational technological systems are not matured enough to handle the share of online learners. With the advent of artificial intelligence (AI) systems, education can be augmented in such a way that a virtual tutor can be created. AI systems would have a lot of applications that can be implemented in the education sector.

Artificial intelligent systems would help students a lot. Students can customize the tutors according to their needs of pace, time, and space. It would be difficult for a person from India to understand the English of a tutor from America; therefore, artificial intelligence can help them to remove this barrier. Artificial intelligence can customize the lectures according to the language requirements of individuals. A few people are slow at grasping things, they can reduce the pace of the tutor to understand things properly [10]. A few are working individuals, they can customize the lecture timings according to their availability. The benefit of having artificial intelligent systems is it would be more realistic, and there would be immediate doubt clarification. There is a traditional education system that gives you limited scope to choose subjects that you

want to pursue; but with artificially intelligent systems, there is a chance to customize the education pattern.

In this regard, there is a need to review the approach, forms and methods of using AI in teaching certain subjects.

As universities endeavor to apply AI to adhere to modern educational demands, a question emerges: how do institutions concretely apply AI to positively influence educational outcomes? To investigate this, a sociological questionnaire was developed aimed at identifying the relationships of students, teachers and administrative staff, as well as the frequency of using AI for educational purposes.

This kind of research helps to form a broader understanding of the place of artificial intelligence in the educational processes of universities. Although the experiments performed are low-precision tests and proof-of-concept that require further development, they provide the basis for future experiments and discussions. These examples demonstrate how learning outcomes can be significantly analyzed and how AI experiments can be designed simply from the perspective of student learning, regardless of the AI methods used. In addition, experiments with learning outcomes allow educational institutions to implement AI methods in data analysis. The goal is not to support for implementation as a whole, but rather to highlight cases where implementation may be useful. The development of AI depends on the understanding and needs of a particular discipline regarding the application of the methodology to the selected dataset; nothing prescriptive is proposed in this regard. Instead, the goal is to demonstrate how adjustments can be made and effectively demonstrate results that will directly impact student learning.

To analyze the results of a sociological survey on “«How often and which artificial intelligence programs and sites are used in the educational process?»», respondents’ responses were taken into account in the main categories: frequency of use, types of programs and platforms used, as well as perception of the advantages and problems associated with the use of AI.

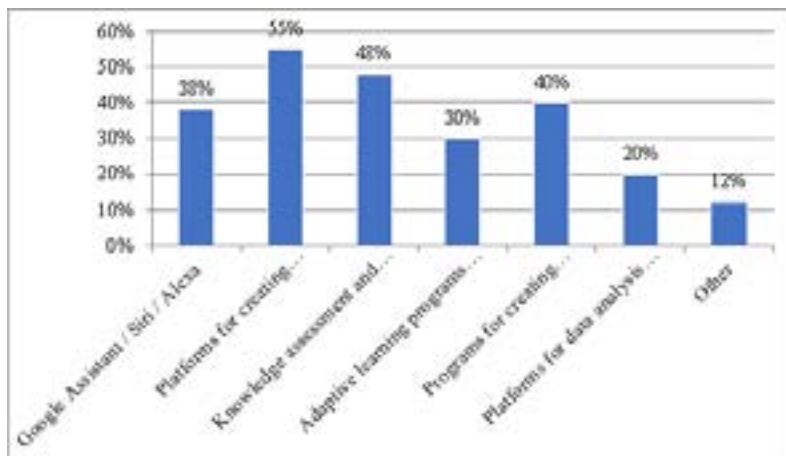
150 people participated in the survey - teachers, students and administrators of educational institutions of Karaganda and South Kazakhstan region.

To the question «How do you feel about the use of artificial intelligence in the educational process, 85 % (127 respondents) were positive; 10 % (15 respondents) took a neutral position; 5 % (8 respondents) showed a negative attitude. As can be seen from the results of the response, the majority of respondents have a positive attitude towards AI in education, which indicates a high degree of interest in integrating new technologies. This may be due to the perception of AI as a means of improving the quality of education and facilitating the work of teachers.

72 % (108 respondents) use artificial intelligence-based programs and/or websites in their educational activities; 28 % (42 respondents) are categorical on this issue, which

may indicate that AI is already part of the educational process, although there is still a group of people who do not use such tools, which may indicate the need for their further implementation and popularization.

The most frequently used artificial intelligence programs and sites, according to the respondents' responses, are shown in Figure 1. It should be noted that one respondent selects several programs and sites.

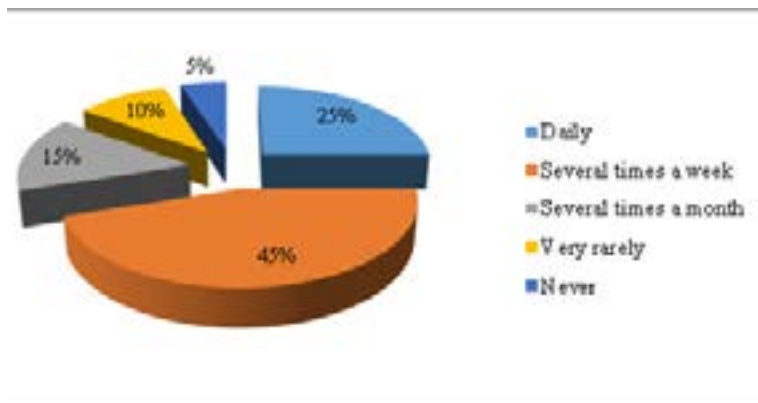


Source: created by the authors

Figure 1 – The most frequently used artificial intelligence programs and sites

As can be seen from the diagram, the most popular programs and sites are platforms for creating educational materials (for example, ChatGPT and Quillbot) and programs for evaluating and testing knowledge (for example, Grammarly and Turnitin). This confirms the growing interest in using AI to automate routine tasks such as job verification and content creation.

The frequency of using artificial intelligence for educational purposes is quite natural, as evidenced by the results of the survey shown in Figure 2.



Source: created by the authors

Figure 2 – Frequency of using artificial intelligence for educational purposes

As we can see in the figure, a larger number of respondents use AI several times a week, which indicates the regular integration of AI into the educational process, although some participants use it less often, which may be due to limited access to such technologies or the peculiarities of the educational process.

According to the respondents, the following types of tasks are solved with the help of artificial intelligence in the learning process (several answer options were allowed):

- Creation of content and materials for lessons: 58 % (87 respondents);
- Checking and evaluating students' work: 50 % (75 respondents);
- Personalization of the educational process: 30 % (45 respondents);
- Assessment of students' level of knowledge: 40 % (60 respondents);
- Analysis of training data and productivity: 25 % (38 respondents);
- Exam preparation assistance: 40 % (60 respondents);
- Student education: 20 % (30 respondents)

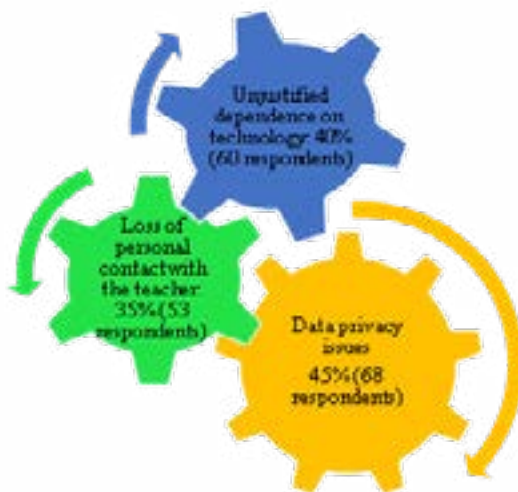
The analysis shows that the largest number of respondents use AI to create materials for lessons and review students' work. This confirms the widespread use of AI to automate teachers' routine tasks. Considerable attention is also paid to preparing students for exams, which underlines the importance of AI in education and training.

When asked about replacing teachers with artificial intelligence in the future, 5 % (8 respondents) answered positively, 85 % (127 respondents) are sure of the opposite, 10 % (15 respondents) were not sure of their answer, which

generally indicates that AI cannot completely replace teachers, the importance of the human element in the educational process is an indisputable fact. Although AI can significantly help automate some aspects of work, the role of a teacher remains indispensable.

The main advantages of using AI in education were indicated by the respondents (there may be several possible answers to choose from): 70 % learning efficiency (105 respondents); 60 % (90 respondents) noted personalized learning; 50 % (75 respondents) noted improvement in the quality of educational materials; teachers noted time savings in the preparation and verification of materials – 45 % (68 respondents); the best feedback for students is 55 % (82 respondents). This confirms that AI is perceived as an important tool for improving the learning process, adapting it to the needs of each student.

Positively noting and identifying the advantages of using AI in the educational process, problems or risks were identified (there are several options to choose from), which are presented in Figure 3.



Source: created by the authors

Figure 3 – Problems or risks of using AI

Figure 3 highlights the main risks: data privacy issues and excessive reliance on technology. These issues require decommunization attention, especially when

it comes to data protection and protecting personal connections between teachers and students.

The last question of the sociological research was open and was aimed at collecting proposals to strengthen the use of artificial intelligence in education. The respondents suggested some improvements, such as improving privacy software, making artificial intelligence technologies more accessible to educational institutions, training teachers to use artificial intelligence effectively, and developing hybrid learning models in which artificial intelligence supports teachers but does not replace them.

In conclusion, the survey results show that artificial intelligence is increasingly being integrated into the curriculum. Especially in areas such as content creation, homework assessment, and student education. Although the majority of respondents are positive about the use of artificial intelligence, they recognize potential risks such as loss of personal interaction with teachers and concerns about data privacy. As artificial intelligence continues to evolve in education, it is important to consider both its benefits and risks while educating teachers and students on the proper use of these technologies.

Conclusion

The advent of artificial intelligence on a large scale is expected to transform several fields, including education. Everything from personalized learning, interactive resource creation, intelligent coaching to inform and enhance decision-making skills to simplified management tasks is on the horizon. As the discussion of integrating artificial intelligence into education intensifies, it is important that educators understand the impact of artificial intelligence and the potential challenges associated with responsible use. Like many other domains, education is at an experimental stage with AI in learning, teaching, and assessment, focused primarily on research and implementation proof of concepts [11]. There is a need to enhance knowledge on the implications of AI in education, particularly at the policy and strategic institutional levels. As education institutes look towards broadening AI's role and impact, it is vital that educators understand the ethics of AI in education to ensure the quality of learning, teaching, and assessment; guide students to its responsible use; and prevent potential pitfalls such as embedded biases.

An important and fundamental issue in the process of introducing AI into the educational field is data privacy and security.

The implementation of artificial intelligence (AI) in education can create massive amounts of data from students, some of which may be sensitive and confidential. For instance, when students utilize an AI tutoring system, their names, emails, and prior academic records may be required for signing up and identifying

their learning gaps. Ensuring the security and privacy of education-related data is critical (Latham & Goltz, 2019). Educational institutions should have a clear privacy policy regarding student data privacy before utilizing any AI technology. Faculty should be made aware of these policies and the potential risks associated with adopting certain AI technology. It is also necessary to establish trust between students and AI systems. Students must know what data the AI system collects and how it will be used. Otherwise, they may feel uneasy about AI systems and might not cooperate fully, undermining AI systems' effectiveness [12].

Although large technology companies are leading AI implementation in education, questions have been raised about the ethicality of their technologies, particularly concerning data privacy and unfair biases. These issues could severely impact students. Data privacy concerns relate to the types of data collected, how the data is used, whether the data will be shared with third parties, and how the data will be deleted after account removal. On the other hand, biases can enter the AI systems that educate students through the data used to build the AI systems. Students may receive inappropriate recommendations or assessments if this data is biased. Tech companies currently do not provide sufficient transparency to reassure the public that student data will be protected and AI systems will not be biased.

The next issue that requires close attention is bias and fairness. Worldwide, there is a growing interest in using AI in education. This interest comes from a desire to enhance learning and teaching, hopes of increased efficiency, and cost-cutting. There are fears that some of the functions currently performed by teachers will be taken over by AI, resulting in fewer teachers and larger groups of students. Academic debates often focus on the AI systems, goods, or services that are used in education and question their impact. AI systems used in education are high risk, as there is a danger that the correlation between educational attainment and social background will be exacerbated. The educational community needs to develop the ability to recognize emerging ethical issues and engage with them as they arise. Otherwise, there is a danger that ethics will be reduced to compliance, putting the onus on individual educators, students, and parents to ensure fair use of AI systems [13].

In conclusion, it should be highlighted that Artificial intelligence (AI) is significantly changing the educational landscape of universities by introducing innovations in the ways of teaching and learning. Modern AI technologies are already being actively implemented in various aspects of the educational process, including assessment automation, the creation of adaptive learning systems, assistance in developing individual educational trajectories for students, and improving the management of educational institutions. Trends in the use of AI in the educational process indicate that the future of education is inextricably linked

to its integration. At the same time, there are a number of challenges, such as the need to prepare teachers and students to effectively interact with new technologies, as well as ethical and social issues related to the use of AI.

Thus, the role of artificial intelligence in the university's educational process will only grow, and its effective application requires an integrated approach that includes both technological innovations and ethical, pedagogical and social aspects.

References

1 **Tedre, M., Toivonen, T., Kahila, J., Vartiainen, H., Valtonen, T., Jormanainen I.** Teaching machine learning in K–12 classroom : Pedagogical and technological trajectories for artificial intelligence education [Text] // IEEE access. – 2021. – Vol. 9. – P. 110558–110572.

2 **Pham, S.T.H., Sampson, P. M.** The development of artificial intelligence in education : A review in context [Text] // Journal of Computer Assisted Learning. – 2022. – Vol. 38. – №. 5. – P. 1408-1421.

3 **Dimitriadou, E., Lanitis, A.** A critical evaluation, challenges, and future perspectives of using artificial intelligence and emerging technologies in smart classrooms [Text] // Smart Learning Environments. – 2023. – Vol. 10. – №. 1. – P. 12.

4 **Mello, R. F., Freitas, E., Pereira, F. D., Cabral, L., Tedesco, P., Ramalho, G.** Education in the age of Generative AI : Context and Recent Developments [Text] // arXiv preprint arXiv:2309.12332. – 2023.

5 **Moursund, D. G.** Brief introduction to educational implications of Artificial Intelligence. – 2006. – [Text] [Electronic resource]. – <https://scholarsbank.uoregon.edu/items/632100eb-588b-4325-b909-2752208e724d>

6 **Bates, T., Cobo, C., Marino, O., Wheeler, S.** Can artificial intelligence transform higher education? // International Journal of Educational Technology in Higher Education. – 2020. – Vol. 17. – P. 1–12. – <https://doi.org/10.1186/s41239-020-00218-x>

7 **Chatterjee, S., Bhattacharjee, K. K.** Adoption of artificial intelligence in higher education : A quantitative analysis using structural equation modelling // Education and Information Technologies. – 2020. – Vol. 25. – P. 3443–3463. <https://doi.org/10.1007/s10639-020-10159-7>

8 **Zawacki-Richter, O., Marin, V. I., Bond, M., Gouverneur, F.** Systematic review of research on artificial intelligence applications in higher education—where are the educators? // International Journal of Educational Technology in Higher Education. – 2019. – Vol. 16. – №. 1. – P. 1–27. – <https://doi.org/10.1186/s41239-019-0171-0>

9 **Hemachandran, K., Priti Verma, Purvi Pareek, Nidhi Arora, Korupalli, V. Rajesh Kumar, Tariq Ahamed Ahanger, Anil Audumbar Pise, Rajnish Ratna** Artificial intelligence : A universal virtual tool to augment tutoring in higher education [Text] // Computational Intelligence and Neuroscience. – 2022. – Vol. 2022. – № 1. – P. 1410448.

10 **Kshirsagar, P. R., Jagannadham, D. B. V., Hamed Alqahtani, Quadri Noorulhasan Naveed, Saiful Islam, Thangamani, M., Minilu Dejene** Human intelligence analysis through perception of AI in teaching and learning [Text] // Computational Intelligence and Neuroscience. – 2022. – Vol. 2022. – №. 1. – P. 9160727.

11 **Franco D'Souza, R., Mary Mathew, Vedprakash Mishra, Krishna Mohan Surapaneni.** Twelve tips for addressing ethical concerns in the implementation of artificial intelligence in medical education [Text] // Medical Education Online. – 2024. – Vol. 29. – № 1. – P. 2330250.

12 **Lakkaraju, K., Vedant Khandelwal, Biplav Srivastava, Forest Agostinelli, Hengtao Tang, Prathamjeet Singh, Dezhi Wu, Matt Irvin, Ashish Kundu** Trust and ethical considerations in a multi-modal, explainable AI-driven chatbot tutoring system : The case of collaboratively solving Rubik's Cube [Text] // arXiv preprint arXiv:2402.01760. – 2024.

13 **Utterberg Modén M., Ponti M., Lundin J., Tallvid M.** When fairness is an abstraction: equity and AI in Swedish compulsory education [Text] // Scandinavian Journal of Educational Research. – 2024. – P. 1–15.

Received 24.02.25.

Received in revised form 18.04.25.

Accepted for publication 27.06.25.

**Г. Н. Акбаева¹, Н. Рамашов²*

¹Е. А. Бөкетов атындағы Қарағанды университеті,
Қазақстан Республикасы, Қарағанды қ.;

²Ө. Жәнібеков атындағы Оңтүстік Қазақстан педагогикалық университеті,
Қазақстан Республикасы, Шымкент қ.

24.02.25 ж. баспаға түсті.

18.04.25 ж. түзетулерімен түсті.

27.06.25 ж. басып шығаруға қабылданды.

УНИВЕРСИТЕТТІҢ ОҚУ ҮРДІСІНДЕГІ ЖАСАНДЫ ИНТЕЛЛЕКТТІҢ РӨЛІ: ТЕНДЕНЦИЯЛАРЫ МЕН ПЕРСПЕКТИВАЛАРЫ

Мақалада жасанды интеллекттің жоғары білім берудегі рөлі қарастырылып, оның оқытуға, оқуға және институционалдық операцияларға әсері қарастырылады. Білім берудегі жасанды интеллекттің эволюциясы 1960 жылдары «Eliza» және «Scholar» бағдарламалары сияқты ерте білім беретін чат-боттардың дамуы сияқты маңызды кезеңдер құрылған кезде басталды. Жасанды интеллект технологиялары шектеулі прогресс кезеңдеріне тап болғанымен, олардың жақында өсуі, әсіресе жаһандық пандемиядан кейін, білім беру мекемелерінде дүрбелең мен алаңдаушылық тудырды. Студенттердің, оқытушылардың және әкімшілердің қатысуымен жүргізілген әлеуметтік сауалнама жасанды интеллекттің қазіргі қолданылуын зерттейді, әсіресе мазмұнды құру мен білімді бағалауда жалпы оң көзқарастарды анықтайды. Дегенмен, деректердің құпиялылығына, қауіпсіздігіне және мұғалім мен оқушы арасындағы өзара әрекеттесудің ықтимал төмендеуіне қатысты алаңдаушылық сақталуда. Жасанды интеллектті қолдану тиімділігі өсіп келе жатқанына қарамастан, сауалнамаға сақатысушылардың көпшілігі бұл дәстүрлі оқыту әдістерін алмастырмай, толықтыруы керек деп санайды. Мақалада жасанды интеллекттің әлеуетін деректерді қорғау және білім беру сапасын жақсарту үшін алгоритмдік бейімділіктен аулақ болу сияқты этикалық ойлармен теңестіру қажеттілігі атап өтілген.

Кілтті сөздер: жасанды интеллект, білім беру үдерісі, жасанды интеллект интеграциясы, этикалық тәсілдер, тенденциялар, деректердің құпиялылығы, білім сапасы, перспективалар.

*Г. Н. Акбаева¹, Н. Рамашов²

¹Карагандинский университет имени Е. А. Букетова,
Республика Казахстан, г. Караганда;

²Южно-Казахстанский педагогический
университет имени О. Жанибекова,
Республика Казахстан, г. Шымкент
Поступило в редакцию 24.02.25.
Поступило с исправлениями 18.04.25.
Принято в печать 27.06.25.

РОЛЬ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В УЧЕБНОМ ПРОЦЕССЕ УНИВЕРСИТЕТА: ТЕНДЕНЦИИ И ПЕРСПЕКТИВЫ

В статье основное внимание уделяется влиянию искусственного интеллекта (ИИ) на образование, обучение и институциональную деятельность, исследуя его роль в высшем образовании. Эволюция ИИ в образовании началась в 1960-х годах, и были достигнуты важные вехи, такие как разработка ранних образовательных чат-ботов, таких как программы Eliza и Scholar. Технология искусственного интеллекта претерпела ограниченное развитие, но ее недавний рост вызвал волнение и беспокойство в образовательной среде, особенно после глобальной пандемии. Социологическое исследование студентов, профессоров и администраторов, посвященное текущему использованию искусственного интеллекта, выявляет в целом позитивное отношение, особенно к созданию контента и оценке информации. Тем не менее, сохраняются опасения по поводу конфиденциальности данных, безопасности и потенциального снижения взаимодействия учителя и ученика. Несмотря на растущее присутствие искусственного интеллекта, большинство респондентов считают, что его следует поддерживать, а не заменять традиционные методы обучения. В этой статье подчеркивается необходимость сбалансировать потенциал искусственного интеллекта с этическими соображениями, такими как предотвращение алгоритмической предвзятости, для улучшения защиты данных и качества образования.

Ключевые слова: искусственный интеллект, образовательный процесс, интеграция искусственного интеллекта, этические подходы, тенденции, конфиденциальность данных, качество образования, перспективы.

Теруге 25.08.2025 ж. жіберілді. Басуға 30.09.2025 ж. қол қойылды.

Электронды баспа

4,19 Kb RAM

Шартты баспа табағы 35,56.

Таралымы 300 дана. Бағасы келісім бойынша.

Компьютерде беттеген З. Ж. Шокубаева

Корректорлар: А. Р. Омарова, Д. А. Қожас

Тапсырыс № 4441

Сдано в набор 25.08.2025 г. Подписано в печать 30.09.2025 г.

Электронное издание

4,19 Kb RAM

Усл.п.л. 35,56. Тираж 300 экз. Цена договорная.

Компьютерная верстка З. Ж. Шокубаева

Корректоры: А. Р. Омарова, Д. А. Қожас

Заказ № 4441

«Toraighyrov University» баспасынан басылып шығарылған

Торайғыров университеті

140008, Павлодар қ., Ломов к., 64, 137 каб.

«Toraighyrov University» баспасы

Торайғыров университеті

140008, Павлодар қ., Ломов к., 64, 137 каб.

8 (7182) 67-36-69

e-mail: kereku@tou.edu.kz

www.pedagogic-vestnik.tou.edu.kz