Scientific article

IRISTI 14.25.09 **https://doi.org/10.55956/TMVC2697**

Z. R.Tasanbayeva*
Candidate of Philology, Associate Professor
Miras University
Shymkent, Kazakhstan
zamira.tass@gmail.com
J.A.Aitbayev
Master's student
Miras University
Shymkent, Kazakhstan
zhasulan.aitbaev@mail.ru

USING ARTIFICIAL INTELLIGENCE TO PERSONALIZE LANGUAGE LEARNING

Abstract*. The article is devoted to the use of artificial intelligence (AI) to personalize the learning process of foreign languages. The paper analyzes modern AI technologies, including adaptive educational platforms, natural language processing systems, and voice assistants. It is emphasized that AI allows taking into account the individual characteristics of students — the level of knowledge, the style of perception of information and the pace of learning. Using machine learning algorithms and big data analysis, such systems generate personalized assignments, track progress, and provide timely feedback. This helps to increase motivation, engagement, and effectiveness of the learning process. The article also discusses the ethical aspects of AI application: personal data protection, transparency of algorithms, and the need to preserve the role of a teacher as a mentor. The authors conclude that AI does not replace humans in teaching, but enhances the teacher's capabilities, helping to implement an individual approach and creating a more flexible and effective language environment for each student.*

Keywords: *artificial intelligence, personalization of learning, language education, adaptive technologies, intelligent systems, machine learning, educational platforms, speech recognition, individual approach, digital pedagogy.*

Introduction. Modern artificial intelligence (AI) technologies are penetrating deeper into all spheres of human life, becoming an integral part of everyday reality. AI systems surround humans almost everywhere: from video surveillance cameras and biometric identification systems used in public transport to recommendation services offering movies, books and music, navigation applications, digital assistants (for example, Alice voice assistant), automated recruitment systems (for example, Vera robot), marketing newsletters, chatbots and even unmanned vehicles.

However, despite the widespread use of digital solutions, there is still a lack of research in the scientific community on the perception of digital educational tools by teachers and students in the field of English language teaching. This area is particularly important, since it is about integrating powerful and effective AI resources into the educational process, which, in turn, can significantly accelerate the acquisition of a foreign language [1].

Artificial intelligence refers to the ability of software systems to correctly interpret incoming data, learn from this data, and use the knowledge gained to solve various tasks, including without direct human intervention [2]. In more detail, AI can be defined as a set of technological solutions capable of reproducing human cognitive functions, including self-learning and decision-

making processes in non-standard situations, which allows achieving results comparable to human activity [2].

The education sector is also actively involved in the processes of digital transformation with the help of AI. The use of AI technologies in educational practice opens up a wide range of new opportunities for both teachers and students, contributing to increased efficiency and flexibility of educational processes. AI plays a particularly important role in providing personalized learning, an approach in which students are given the opportunity to independently build their educational trajectory, choosing the pace, format, content and level of complexity of educational materials in accordance with individual goals, interests, preferences and needs. This also includes flexible feedback, the choice between individual and group work, the development of self-organization skills and a learning culture, as well as the formation of digital literacy and flexible skills [3].

Among the key educational trends today are: individualization of educational routes, adaptive learning, student involvement in the development of the educational program content, the use of open educational resources, active networking, as well as the implementation of interuniversity and interdisciplinary educational projects. In this context, personalized e-learning based on AI acts as one of the most relevant trends in the development of higher education. This model allows students to gain an educational experience that is as close as possible to their individual needs and perceptual characteristics, which contributes to a deeper assimilation of knowledge and increases motivation to learn.

By personalized learning, we mean an educational process that creates conditions for maximizing the potential of each student, developing his personality, independence, responsi-bility and flexible skills necessary for a successful life in a rapidly changing world [4]. At the same time, the modern assessment system is mainly focused on testing academic knowledge and almost does not cover the formation and development of so-called "soft skills": critical thinking, creativity, sociability, teamwork, self-presentation skills and cultural competence [5]. The development of new methods for evaluating these skills can also rely on the capabilities of artificial intelligence.

According to a number of studies, about 77% of education professionals believe that personalized learning plays a key role in increasing student engagement and the effectiveness of the educational process. The adaptation of educational content to the individual characteristics of each student is becoming an integral element of the modern educational paradigm. More and more educational institutions around the world are implementing practices based on big data analysis and AI technologies in order to improve students' academic and metacognitive outcomes.

In connection with the above, the purpose of this study is to explore the possibilities of using artificial intelligence technologies to implement a personalized approach in language teaching. Personalized learning is interpreted here as a form of organization of the educational process, in which the speed of learning, teaching methods and teaching content are selected and adapted in accordance with the needs, level of training and educational goals of each individual student.

Research conditions and methods. The study was conducted as part of the study of the possibilities of integrating artificial intelligence (AI) technologies into the process of personalized foreign language teaching. The main goal was to identify the effectiveness of AI tools in

adapting the content and learning strategy to the individual needs of students.

The experimental part of the study was organized on the basis of an online English language course for students of non-linguistic areas of the university. The study involved 60 students aged 17-18 years, divided into two equal groups: control (traditional teaching methods) and experimental (learning using AI services). The duration of the experiment was 8 weeks.

The following methods were used to achieve the goals set:

1. Theoretical analysis (review of modern scientific and methodological literature on the following topics: personalization in teaching, AI in education, adaptive learning technologies).

2. Pedagogical experiment: educational process in two formats (traditional and AI-supported); assessment of participants' progress based on entrance and final testing (based on the CEFR scale); implementation of automated diagnostic tools to track individual student trajectories.

3. Questionnaires and interviews with teachers and students.

4. Statistical data processing

Research results. Personalization of learning is considered as one of the key priority areas of modern education, since it ensures the construction of individual educational trajectories, stimulates the development of students' creative potential, promotes their professional and social self-determination, and also helps in the realization of personal life goals and aspirations [6]. Modern research in this field focuses on creating approaches to managing the learning process and content with a focus on a specific student, which allows for flexible adaptation of learning depending on their personal characteristics, level of knowledge and preferences [7].

Personalized educational systems are based on algorithms that can make decisions based on the input data received about each individual student. Such systems are designed to optimize the educational process.: they form individual recommendations based on the analysis of the information collected about the student — his activity, successes, mistakes, preferences, the pace of learning the material. The use of AI technologies makes it possible to effectively track students' progress, make changes to the content and structure of the course in real time, and take into account the student's experience in further adapting the content [8].

Nevertheless, the development of such personalized systems involves a number of difficulties. One of the key tasks is to design and fill the system with diverse educational content that takes into account individual characteristics of information perception. The educational material should not only correspond to the student's level of education, but also be presented in a suitable form — visual, auditory, textual, etc. At the same time, it is necessary to take into account not only the subject and structure of the content, but also its volume, degree of complexity and form of presentation, since all this affects the effectiveness of training.

Based on the analysis, the basic principles of building personalized learning trajectories were identified, including:

• providing round-the-clock access to the educational environment;

• organization of educational interaction in virtual formats and contexts;

• adaptation of educational content to the individual needs of students;

• Regular and prompt feedback provided in real time;

• the opportunity for students to choose the pace and methods of

mastering the material in accordance with their own educational goals.

For a more comprehensive presentation of the factors determining the effectiveness of personalization of higher education, the paper presents the results of an analysis of the advantages and disadvantages of using AI in personalized e-learning for students.

Advantages:

• Individualization of the educational process: creation of personalized programs that take into account the individual characteristics of the student, including his level of training, motivation, interests and educational goals.

• Increased motivation and engagement: AI tools make the learning process more interactive and interesting, which promotes active student participation.

• Increased learning efficiency: due to the possibility of learning at an individual pace, students master the material with greater efficiency.

Disadvantages:

• Limited accuracy of AI algorithms: errors in data interpretation are possible, which can lead to the formation of ineffective recommendations and a decrease in the quality of educational solutions.

• Difficulties of integration into the existing education system: the need to adapt programs and methods, insufficient training of teaching staff to work with AI systems.

• High complexity of implementation and support: requires significant resources for development, implementation and constant maintenance, as well as addressing issues related to data security and the ethics of using AI.

Thus, the introduction of AI into personalized e-learning in universities is a powerful tool for improving the quality of education through flexibility, adaptability, individual approach and automation of educational processes. However, along with the obvious advantages, this process is fraught with a number of challenges — technical, organizational, ethical and financial. Obviously, as AI technologies improve, the possibilities of personalization will expand, but at the same time, the risks associated with the inaccuracy of algorithms, data confidentiality and difficulties in integrating them into the educational environment will increase. Taking into account all these aspects, it can be concluded that the development of personalized learning using AI is a promising direction for the transformation of higher education, but requires an integrated approach.

Discussion of scientific results. The objectives of the training, the approaches used, as well as the content of the curricula and the sequence of their presentation can vary significantly depending on the individual characteristics, level of training and educational needs of each student. The modern paradigm of personalized learning includes several key areas, each of which is implemented taking into account different models and technologies.

One of the most common is adaptive learning, in which, based on the collection and analysis of data on the learning process of a particular student, from interaction with content to test results, the system generates learning modules that correspond to the student's level of knowledge and preferred learning style. Individualized learning is characterized by the ability to vary the pace of passing the material depending on the personal needs and capabilities of the student. Within the framework of differentiated learning, various pedagogical approaches are used, adapted to the characteristics of individual students, including methods of presenting

material and assessment methods. In addition, competence-based learning involves the student's advancement along an educational trajectory based on the demonstration of formed competencies, which includes both the application and creation of new knowledge, the development of skills and abilities [9].

E-learning provides extensive opportunities for interaction between teachers and students, regardless of their location and time, using modern information and communication technologies. This area is actively developing and exploring, representing a flexible system for delivering personalized and interactive content that supports the formation of educational communities bringing together students, practitioners and experts. E-learning can act as an addition to traditional education, as well as its full-fledged alternative, especially in conditions that limit full-time participation (for example, for students with disabilities) [10].

A key condition for the effectiveness of e-learning is the need to design an educational environment taking into account the context: the requirements of teachers, their individual approaches to learning, and the diverse needs of students. Modern digital educational solutions should not only provide access to multimedia content, but also contribute to the development of cognitive, behavioral and emotional components of educational interaction. At the same time, one of the significant problems remains the insufficient level of personalization: educational platforms often offer a universal course path, without taking into account personal preferences, rhythm and the student's existing experience. As a rule, the student is offered a linear passage of educational material from preliminary diagnosis to final assessment, which may limit effectiveness and motivation [11].

To improve the effectiveness of personalized learning, e-education systems must meet the following criteria:

• Ensuring that the course content meets both state standards and the objectives of developing students' personal and social competencies, including self-regulation and emotional intelligence skills;

• The ability to customize the learning experience according to the interests, goals and preferences of each student;

• Support for the individual pace of passing the material, including the possibility of accelerated progress or, conversely, in-depth study of complex topics until complete assimilation;

• Teachers have access to real-time analytical data and results, which allows them to adapt the methodology and content, as well as provide the necessary assistance in a timely manner.;

• Transparency and accessibility of learning objectives and assessment criteria for students, ensuring a clear understanding of requirements and expectations at each stage of learning.

In the context of e-learning, personalization involves the use of AI and student data analysis to adapt the educational interaction between the teacher and the student in order to achieve better results. Scientific research on this topic focuses on two key aspects: firstly, on the management of educational content, and secondly, on the optimization of learning activities based on the interaction of a particular student with the digital environment [12].

Personalized learning systems based on modern technologies provide students with the opportunity to:

• formulate learning goals independently;

• manage both the content and the learning process;

• interact with other participants in the educational process;

• Achieve academic and meta-subject results in accordance with an individual development trajectory.

Such systems may include one or more interconnected subsystems implemented in the form of desktop applications, as well as cloud or web services that provide continuous support for the learning process.

Personalization in the field of e-learning covers a wide range of components of the educational process aimed at creating the most comfortable and productive learning environment, focused on the individual needs of the student. In particular, personalization can manifest itself in the visual and functional settings of the learning environment — changing parameters such as font size and type, color scheme, background images, interface themes and other visual elements. The content component is also subject to personalization.: It can be audio and video content, graphic elements, text materials, combined forms of information presentation. The organization of interaction between participants in the educational process — teachers, students and educational platforms - is becoming essential. This interaction can be implemented through gamification, elements of blended learning, a system of tests and exercises, adaptive modules, interactive manuals, etc. In addition, the structure and sequence of the presentation of educational material plays an important role, which may vary depending on the level of knowledge and the rate of assimilation of information by each individual student. Integral components of personalized learning are assessment methods, which can also be adapted, and feedback systems that ensure timely correction of the learning process and student support [13].

In the context of such a multi-layered structure of personalized e-learning, the use of artificial intelligence (AI) technologies is of particular importance. AI, in essence, is an imitation of human cognitive functions by computer systems. It covers such processes as learning — that is, the collection, analysis and use of information, reasoning — the application of logical rules to draw conclusions, and the ability to self-correct. Modern AI applications include, among others, expert systems, speech recognition technologies, and machine vision [13].

One of the key areas in which the use of AI can bring significant transformations is education, especially its electronic format. The integration of AI into e-learning makes it possible to create realistic, interactive learning environments with which learners can interact. In this process, students come into contact with intelligent agents capable of registering changes in the digital educational environment, analyzing them and adapting the learning process accordingly [13].

Among the main applications of artificial intelligence in personalized e-learning, there are several functional capabilities. First, AI is able to automate routine processes in education, such as checking assignments, evaluating academic performance, and generating reports on student academic achievements. This significantly reduces the burden on teachers and allows students to provide feedback promptly. Secondly, the software using AI is able to adapt to the individual needs of students, which helps to increase the level of personalization. Nowadays, adaptive learning platforms and educational games are increasingly being used that can analyze a student's progress, identify problematic topics, return to complex aspects, and help the student master the material at the most comfortable pace for him.

Another significant aspect of the use of AI in E-learning is the possibility of dynamic modification of training courses.

Artificial intelligence can identify program fragments that need to be improved and provide valuable recommendations to both teachers and students. An example of successful implementation of such solutions is the Coursera educational platform, which uses AI algorithms to analyze student error statistics. If the system detects that many students are responding incorrectly to the same assignment, it notifies the teacher of a possible problem in the content. At the same time, students are provided with an additional hint or explanation, which helps to correctly interpret the assignment and eliminate the gap in understanding the topic. This mechanism contributes to a deeper understanding of the material and the formation of a unified conceptual framework for all students. In addition, the immediate feedback provided by AI systems replaces the traditional expectation of a response from the teacher and increases the efficiency of knowledge acquisition [13].

There is also a direction related to the creation of intelligent educational programs based on AI algorithms. These programs are able to effectively teach basic knowledge and skills, providing support in standard situations. However, at the current stage, they are not yet fully capable of replacing teachers in tasks related to the development of critical thinking, creativity, and more complex cognitive strategies. Thus, AI in learning acts as an auxiliary, but powerful tool aimed at strengthening the individualization and adaptability of the educational process [13].

One of the most significant consequences of the introduction of artificial intelligence technologies in the field of education is the transformation of the role of the teacher. Despite the fact that teachers will always occupy an important place in the learning process, with the development of AI, the emphasis is gradually shifting. Modern intelligent systems can be programmed to provide expert information, answer standard questions, generate educational content, and perform the functions of a help system. However, as such solutions are implemented, the traditional function of the teacher as a source of knowledge fades into the background, giving way to a facilitating role – moderator, mentor and organizer of the individual educational path of each student [14].

In addition, AI in an educational environment can change the perception of trial and error, one of the most important principles of learning, which, despite its effectiveness, often causes students anxiety associated with fear of failure or evaluation. The use of artificial intelligence allows students to safely experiment, analyze mistakes and receive support in the learning process without the risk of condemnation, in a more emotionally neutral environment, which contributes to the formation of sustainable motivation for cognition and the development of independent thinking skills [14].

As a result of the analysis of practice and scientific sources, the main opportunities that neural networks and AI technologies open up for modern theory and practice of education have been identified.:

• Personalization of the learning experience – providing each student with an individual learning route based on an analysis of their progress, interests and level of training;

• Optimization of teaching activities – automation of routine processes such as job review, assessment of academic performance, selection of educational content;

• Improved methods of adaptive assessment and preparation of materials – the ability to quickly modify educational content in accordance with the changing

needs of the student and the dynamics of his learning.

However, along with the advantages of using AI in education, possible negative consequences are beginning to be actively discussed, which is becoming a matter of concern for major international and national organizations. The key risks include:

• Social challenges – in particular, the partial or complete replacement of teacher functions by intelligent agents or humanoid robots. Such substitution can lead to a decrease in the importance of pedagogical work and alienation of the student from human interaction.;

• Military-strategic threats, including the possibility of cyber attacks on educational and government digital infrastructure;

• Moral and ethical issues – the use of content in education that contradicts the moral and cultural norms of society;

• Legal issues – copyright infringement, illegal use of intellectual property in the preparation of educational materials and programs.

All these aspects demonstrate that with the active introduction of digital technologies, a person remains a key actor responsible for defining the boundaries, forms and permissibility of interaction with AI in the educational environment.

In addition, there is a psychological and cognitive component to the problem. Dependence on digital technologies and constant presence in the online environment contribute to "digital burnout" and possible distortion of perception of reality. The uncontrolled use of AI can become a factor provoking cognitive disorders, including a decrease in the level of independent thinking, creativity, and critical perception of information. Educational processes that were previously carried out exclusively with the participation of human intelligence are becoming mechanized and standardized, which requires additional attention to the issues of psychological stability of students.

The modern educational paradigm also does not provide definitive answers to a number of fundamental questions.:

1. What should be the structure and content of the education of the future? What will be considered as priority knowledge and skills?

2. What areas and to what extent will AI be used in the learning process? How to ensure a balanced distribution between technological and humanitarian approaches?

3. Will the human brain, both of the student and the teacher, be able to adapt to the growing workload associated with the need to assimilate and process huge amounts of information in conditions of high speed of change?

In conclusion, it should be emphasized that although drastic changes may take decades, it is already obvious today that artificial intelligence is capable of radically transforming almost all key components of the educational process. It allows you to significantly expand the possibilities of personalization of e-learning, providing students with access to learning at any time and from anywhere in the world. With the help of intelligent systems and software, students gain access to content that can replace traditional forms of classroom teaching.

At the current stage, AI is already being used to teach students basic academic competencies. However, as data accumulates and technology improves, we can expect an expansion in the range of educational services provided by AI. It is also able to automate the assessment and attestation processes, reducing the burden on the teacher. In the future, AI will increasingly adapt to the individual needs of the student, adapting to his pace and style of learning, as well as changing both the place and format of education,

up to a partial or complete replacement of the role of a teacher in some disciplines.

Thus, AI in e-learning is able to provide a model in which learning paths are developed individually for each student based on their achievements and needs, in contrast to the traditional approach, which assumes a single educational content for the entire audience. Experts in the field of educational technologies consider AI as an effective tool capable of implementing personalized learning without additional burden on teachers, while maintaining high standards of educational quality.

References

1. Shingareva M.Yu. Satisfaction of teachers and students with the implementation of digital educational resources for learning English // Dulaty University Bulletin, 2024. No1. P.42-49
2. Gafarov F. M., Galimyanov A. F. Iskusstvennye nejronnye seti i prilozheniya [Artificial neural networks and applications]: ucheb. posobie. Kazan': Izd-vo Kazan. un-ta, 2018. – 121p. [in Russian]
3. Ermakov D. S. Personalizirovannaya model' obrazovaniya s ispol'zovaniem cifrovoj platform [A personalized education model using a digital platform]: metod. posobie; pod red. E. I. Kazakovoj. M., 2020. URL: https://vbudushee.ru/upload/lib/ . [in Russian]
4. Minyazova E. R. «Bol'shie dannye» i personalizirovannoe obuchenie ["Big data" and personalized learning] Vysshee obrazovanie segodnya. 2022. No. 5–6. P. 41–45. DOI: 10.18137/RNU.HET. 22.05-06. P.041. EDN CPLGXK. [in Russian]
5. Iskusstvennyj intellekt v obrazovanii: Izmenenie tempov obucheniya. Analiticheskaya zapiska IITO YuNESKO [Artificial intelligence in education: Changing the pace of learning. Analytical note by UNESCO IITE]/ S. Daggen; red. S. Yu. Knyazeva; per. s angl.: A. V. Parshakova. M.: In-t YuNESKO po informacionnym tekhnologiyam v obrazovanii,2020. URL: https:// iite.unesco.org/wp-content/uploads/2020/12/Steven_Duggan_AI-in Education _2020_RUS.pdf. [in Russian]
6. Toktarova V. I., Shashkov O. V., Popova O. G. Tekhnologii nejronnyh setej v personalizacii elektronnogo obucheniya studentov [Neural network technologies in the personalization of e-learning for students]// Pedagogicheskaya informatika. 2021. – No. 3. P. 106–120. URL: https://www. elibrary.ru/item.asp?id=46696847. [in Russian]
7. Rana Khudhair Abbas Ahmed. Artificial Neural Networks in E-Learning Personalization: A Review // International Journal of Intelligent Information Systems. 2016. – Vol. l5. No. 6. P.104–108. DOI: https://doi.org/10.11648/j.ijiis.20160506.14
8. Pyrnova O. A., Zaripova R. S. Tekhnologii iskusstvennogo intellekta v obrazovanii [Artificial intelligence technologies in education] Russian Journal of Education and Psychology. 2019. – No.10 (3). P. 41–44. URL: https://cyberleninka.ru/article/n/tehnologii-iskusstvennogo-intellekta-v-obrazovanii [in Russian]
9. Burnyashov B.A. Personalizaciya kak mirovoj trend obucheniya v uchrezhdeniyah vysshego obrazovaniya [Elektronnyj resurs] [Personalization as a global trend in higher education institutions] Sovremennye problemy nauki i obrazovaniya. 2017. – No. 1. P.90. [in Russian]
10. Paskova A.A. Mobil'noe obuchenie v vysshem obrazovanii: tekhnologii BYOD [Mobile Learning in Higher Education: BYOD technologies] Vestnik Majkopskogo gosudarstvennogo tekhnologicheskogo universiteta. 2018. – No4. P. 98-105. [in Russian]
11. Vajnshtejn Yu.V., Esin R.V. Personalizaciya obrazovatel'nogo processa v elektronnoj obrazovatel'noj srede [Elektronnyj resurs] [Personalization of the educational process in an electronic educational environment] Elektronnoe obuchenie v nepreryvnom obrazovanii. 2017. – No. 1. P. 54-59. [in Russian]

12. Starodubcev V.A. Personalizaciya virtual'noj obrazovatel'noj sredy [Elektronnyj resurs] [Personalization of the virtual educational environment] Pedagogicheskoe obrazovanie v Rossii. 2015. – No. 7. P. 24-29. [in Russian]
13. Hughes D. What Will Personalized Education Look Like in 2020? [Elektronnyj resurs] Digital marketing institute. URLhttps:// digitalmarketinginstitute.com/blog/what-will-personalized-education-look-like- in-2020-education
14. Dhonson M. Personalization Is the Key to Transforming Education [Elektronnyj resurs] National Review. 2018. URL: https://www.nationalreview.com/2018/04/education-technology-personalized-learning- better-results
15. Kotlyarova I.O. Tekhnologii iskusstvennogo intellekta v obrazovanii [Artificial intelligence technologies in education] Vestnik YuUrGU. Seriya «Obrazovanie. Pedagogicheskie nauki». – 2022. – T. 14. – No. 3. – P. 69–82. DOI: 10.14529/ped220307
16. Personalizaciya obrazovaniya: chto eto takoe. [Personalization of education: what is it.] – https://skillbox.ru/media/education/chto-takoe-personalizatsiya-obrazovaniya/

З.Р.Тасанбаева*, **Ж.А.Айтбаев**
«*Мирас*» *Университеті*, *Шымкент*, *Қазақстан*

ТІЛДІК ОҚЫТУДЫ ЖЕКЕЛЕНДІРУ ҮШІН ЖАСАНДЫ ИНТЕЛЛЕКТТІ ПАЙДАЛАНУ

Аңдатпа. Мақала шет тілдерін оқыту процесін жекелендіру үшін жасанды интеллектті (AI) қолдануға арналған. Жұмыста адаптивті білім беру платформаларын, табиғи тілді өңдеу жүйелерін және дауыстық көмекшілерді қоса алғанда, заманауи AI технологиялары талданады. AI оқушылардың жеке ерекшеліктерін — білім деңгейін, ақпаратты қабылдау стилін және оқу қарқынын ескеруге мүмкіндік беретіні атап өтілген. Машиналық оқыту алгоритмдері мен үлкен деректерді талдау арқылы мұндай жүйелер жеке тапсырмаларды қалыптастырады, прогресті бақылайды және уақтылы кері байланыс береді. Бұл оқу процесінің мотивациясын, қатысуын және тиімділігін арттыруға ықпал етеді. Мақалада АИ қолданудың этикалық аспектілері де қарастырылады: жеке деректерді қорғау, алгоритмдердің ашықтығы және оқытушының тәлімгер ретіндегі рөлін сақтау қажеттілігі. Авторлар AI оқудағы адамды алмастырмайды, бірақ жеке көзқарасты жүзеге асыруға көмектесу және әрбір оқушы үшін икемді және тиімдірек тілдік ортаны құру арқылы мұғалімнің мүмкіндіктерін арттырады деген қорытындыға келеді.

Тірек сөздер: жасанды интеллект, оқытуды жекелендіру, тілдік білім, адаптивті технологиялар, интеллектуалды жүйелер, Машиналық оқыту, білім беру платформалары, сөйлеуді тану, жеке көзқарас, сандық педагогика.

З.Р.Тасанбаева*, **Ж.А.Айтбаев**
«*Мирас*» *Университеті*, *Шымкент*, *Қазақстан*

ИСПОЛЬЗОВАНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА ДЛЯ ПЕРСОНАЛИЗАЦИИ ЯЗЫКОВОГО ОБУЧЕНИЯ

Аннотация: Статья посвящена использованию искусственного интеллекта (ИИ) для персонализации процесса обучения иностранным языкам. В работе анализируются современные технологии ИИ, включая адаптивные образовательные платформы, системы обработки естественного языка и голосовые ассистенты. Подчёркивается, что ИИ

позволяет учитывать индивидуальные особенности учащихся — уровень знаний, стиль восприятия информации и темп обучения. С помощью алгоритмов машинного обучения и анализа больших данных такие системы формируют персонализированные задания, отслеживают прогресс и предоставляют своевременную обратную связь. Это способствует повышению мотивации, вовлечённости и эффективности учебного процесса. В статье также рассматриваются этические аспекты применения ИИ: защита персональных данных, прозрачность алгоритмов и необходимость сохранения роли преподавателя как наставника. Авторы делают вывод, что ИИ не заменяет человека в обучении, а усиливает возможности преподавателя, помогая реализовать индивидуальный подход и создавая более гибкую и эффективную языковую среду для каждого ученика.

Ключевые слова: искусственный интеллект, персонализация обучения, языковое образование, адаптивные технологии, интеллектуальные системы, машинное обучение, образовательные платформы, распознавание речи, индивидуальный подход, цифровая педагогика.

Received 15.07.2025
Received in revised form 25.09.2025
Accepted for publication 30.09.2025

Cite the article: *Tasanbayeva, Z.R. Using artificial intelligence to personalize language learning/ Z.R. Tasanbayeva, J.A.Aitbayev // Bulletin of Dulaty University. – 2025. – No.3. p. 36-46* *https://doi.org/10.55956/TMVC2697*