

Using artificial intelligence to adapt foreign language learning materials to the students' individual needs

Usar inteligência artificial para adaptar os materiais de aprendizado de idiomas estrangeiros às necessidades individuais dos alunos

Utilizar la inteligencia artificial para adaptar los materiales de aprendizaje de lenguas extranjeras a las necesidades individuales de los estudiantes

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Abstract: *The aim of the research is to determine the effectiveness of using artificial intelligence (AI) in creating an individual trajectory for students learning a foreign language. The study employed the Amthauer Intelligence Structure Test (IST) and the Taylor Manifest Anxiety Scale (TMAS). The study found that students studying a foreign language have medium performance rates. Speaking is the most developed, while listening and reading are not sufficiently developed. The ability to draw conclusions, identify logical patterns, and associative memory are the most significant for students learning a foreign language. The conducted formative experiment demonstrated that the AI use is effective for adapting educational materials to the individual characteristics of students learning a foreign language. However, this is possible only provided the teacher's involvement in the educational process. The main conditions for the effective AI use for teaching a foreign language are effective feedback, creating a positive atmosphere of interaction, the teacher's competence in using modern technologies, and available material on the development of students' cognitive abilities. The results of our research create a basis for generating high-quality individualization of foreign language learning using AI. Research prospects include comparing the effectiveness of AI-based algorithms in the professional training of students of different majors.*

Keywords: *Artificial intelligence. Foreign language. Higher education. Higher school students. Individual needs.*

Resumo: O objetivo da pesquisa é determinar a eficácia do uso da inteligência artificial (IA) na criação de uma trajetória individual para alunos que estão aprendendo uma língua estrangeira. O estudo empregou o Teste de Estrutura de Inteligência de Amthauer (IST) e a Escala de Ansiedade Manifesta de Taylor (TMAS). O estudo constatou que os alunos que estudam um idioma estrangeiro têm índices de desempenho médios. A fala é a mais desenvolvida, enquanto a audição e a leitura não são suficientemente desenvolvidas. A capacidade de tirar conclusões, identificar padrões lógicos e a memória associativa são as mais importantes para os alunos que estão aprendendo um idioma estrangeiro. O experimento formativo realizado demonstrou que o uso da IA é eficaz para adaptar os materiais educacionais às características individuais dos alunos que

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estão aprendendo um idioma estrangeiro. Entretanto, isso só é possível com o envolvimento do professor no processo educacional. As principais condições para o uso eficaz da IA no ensino de um idioma estrangeiro são o feedback eficaz, a criação de uma atmosfera positiva de interação, a competência do professor no uso de tecnologias modernas e o material disponível sobre o desenvolvimento das habilidades cognitivas dos alunos. Os resultados de nossa pesquisa criam uma base para gerar uma individualização de alta qualidade do aprendizado de idiomas estrangeiros usando IA. As perspectivas de pesquisa incluem a comparação da eficácia dos algoritmos baseados em IA na formação profissional de alunos de diferentes cursos.

Palavras-chave: Ensino superior. Estudantes de ensino superior. Inteligência artificial. Língua estrangeira. Necessidades individuais.

Resumen: El objetivo de la investigación es determinar la eficacia del uso de la inteligencia artificial (IA) en la creación de una trayectoria individual para estudiantes que aprenden una lengua extranjera. El estudio empleó la Prueba de Estructura de Inteligencia de Amthauer (IST) y la Escala de Ansiedad Manifiesta de Taylor (TMAS). El estudio constató que los alumnos que estudian una lengua extranjera presentan índices de rendimiento medios. La expresión oral es la más desarrollada, mientras que la comprensión auditiva y la lectura no lo están suficientemente. La capacidad de sacar conclusiones, identificar patrones lógicos y la memoria asociativa son las más significativas para los alumnos que aprenden una lengua extranjera. El experimento formativo realizado demostró que el uso de la IA es eficaz para adaptar los materiales educativos a las características individuales de los alumnos que aprenden una lengua extranjera. Sin embargo, esto sólo es posible si el profesor participa en el proceso educativo. Las principales condiciones para el uso eficaz de la IA en la enseñanza de una lengua extranjera son la retroalimentación eficaz, la creación de un ambiente positivo de interacción, la competencia del profesor en el uso de las tecnologías modernas y el material disponible sobre el desarrollo de las capacidades cognitivas de los alumnos. Los resultados de nuestra investigación sientan las bases para generar una individualización de alta calidad del aprendizaje de lenguas extranjeras utilizando la IA. Las perspectivas de investigación incluyen la comparación de la eficacia de los algoritmos basados en IA en la formación profesional de estudiantes de distintas especialidades.

Palabras clave: Enseñanza superior. Estudiantes de enseñanza superior. Inteligencia artificial. Lenguas extranjeras. Necesidades individuales.

1 INTRODUCTION

The AI integration into modern life significantly changes the structural and qualitative characteristics of society (Qian et al., 2024). It is undeniable that the use of this technology increases the efficiency of the functioning of various social spheres (GÓRRIZ et al., 2020; HYDER et al., 2019). The changes in the educational sector that have occurred as a result of using the AI capabilities are revolutionary (Wang et al., 2024). In fact, AI is currently one of the main tools for progressive reform of upbringing and the education system for youth (Zhang and Aslan, 2021). This statement is especially relevant in the context of the higher education system, where high-quality training of future specialists is impossible without the AI implementation (Slimi, 2023). The impact of this technology on improving the efficiency of teaching academic subjects, increasing students' academic performance and enhancing their learning motivation is proven (Cano; Troya, 2023). The use of AI to individualize and

increase the quality of students' educational by taking into account the students' personality structure is of particular importance (Sara-vana Kumar, 2019). The research on this issue is a prerequisite for establishing effective ethical and social norms for the AI use in higher education (ANDROSCHUK and MALYUGA, 2024). A promising direction for further research is the study of the AI use in a number of areas of training, in particular, linguistic education (Liang et al., 2021).

Learning a foreign language in modern Ukraine is a vital necessity, which allows optimizing the processes of foreign and domestic policy. In the context of the higher education system, the issue of foreign language teaching is closely related to the problem of technologization of education in general and, in particular, the AI implementation. The general theoretical foundations of the AI introduction into the process of learning a foreign language are studied (Weihua, 2019; Kalko et al., 2024). The didactic foundations of the introduction of this technology in the development of students'

foreign language competence are clarified (KADEMIA et al., 2022). However, these studies are mainly theoretical. At the same time, the AI introduction for individualization of foreign language learning in higher education institutions (HEIs) requires experimental justification. Such studies are practically significant in view of increasing the technological capabilities and modernization of the higher education system.

The aim of the article is to determine the effectiveness of the AI use in creating an individual trajectory of foreign language learning for students.

Research objectives:

- a) Analyse the main conditions and features of the effective AI use in higher education;
- b) Identify the subjective characteristics of students that affect the success of foreign language learning;
- c) Establish the impact of AI on the effectiveness of students' knowledge of foreign language learning material.

2 LITERATURE REVIEW

AI is currently the subject of research in many areas. In general, this phenomenon can be defined as a computer technology that enables simulating intellectual behaviour that is as close as possible to human in the context of optimizing decision-making (Naqvi, 2023). Lu et al. (2019) note that this technology is based on neural networks, deep learning, and character recognition. The general relevance of this tool determines its active use in education through chatbots, expert procedures, smart tutors, personalized learning, and virtual educational environments (Zhang; Aslan, 2021). According to Chaudhry and Kazim (2021), the AI integration into education became possible due to the global spread of information technologies (IT) and free access to them for students in a society. AI occupies a special place in the higher education system.

There are five main areas of AI use in higher education: assessment, prediction of success, organization of the educational process, tutor-

ing, learning management (Crompton; Burke, 2023). These positions are supported by other researchers, noting the relevance of intelligent analytics of educational content using AI (Sallas-Pilco; Yang, 2022). Maphosa and Maphosa (2023) note that the AI use in the educational system reduces the burden on teachers, better individualize learning, and contributes to improving student assessment. An important area of application of this technology in higher education is the identification of students who have problems with academic performance and are at risk of not completing the course (Akgun; Greenhow, 2022). This enables appropriate adjustment of the educational process. Huang et al. (2020) believe that these capabilities increase the accuracy of predicting students' academic performance.

Researchers believe that AI has a number of advantages for teachers. In particular, its use for discussion-based learning in distance education is effective (Seo et al., 2021). Ellis (2019) notes that smart technologies enable teachers to analyse a large amount of educational statistics in order to establish the advantages and disadvantages of a particular student in education. AI can help teachers to optimize the individualization of learning by determining a personal didactic style and creating an appropriate social climate (Xu, 2021). This opinion is supported by Shrivastava et al. (2023), who indicate that the use of smart technologies involves the automated selection of the optimal pace and tactics of learning in accordance with the students' inner world. So, in the context of the higher education, AI allows for maximum consideration of the current requirements of the labour market in professional training (Barletta et al., 2022).

There are a number of studies on the AI use in the process of learning a foreign language in a higher education institution. In particular, the effectiveness of the influence of ChatGPT on improving writing, grammar knowledge, vocabulary expansion and educational motivation of higher school students was established (Karataş et al., 2024). The researchers demonstrated that AI allows for the qualitative development of basic foreign language skills, provided proper

feedback (Ayotunde et al., 2023). In contrast to such optimistic statements, Mohamed (2023) states the lack of a unified position among teachers regarding the effectiveness of AI in the students' language learning (MOHAMED, 2023). In this context, the researchers found insufficient effectiveness of AI in identifying structural errors of students when checking written assignments (Algaraady; Mahyoob, 2023). This means that the teacher's role in teaching foreign languages remains significant, despite technological progress.

Research into the use of AI in higher education is a promising direction of modern pedagogy. Attempts to study the implementation of AI as a means of improving students' foreign language skills are quite widely presented. However, the issues of experimental verification of the AI role in the development of foreign language competencies of higher school students remain open. A separate focus is the empirical study of the individualization of the educational process in the context of modern technologies.

3 METHODS AND MATERIALS

The general scheme of the conducted research corresponds to the principles of organizing formative experiments in pedagogy. At the same time, the stages of the conducted experiment characterize the general logic of academic knowledge. The structure of the research involves obtaining objective empirical data.

The organizational stage included a number of planning actions. The aim of this stage is to create the most favourable conditions for the fulfilment of research objectives. This stage provided for the selection of the methods for collecting empirical information and determining an algorithm for implementing a formative experiment to test the impact of AI on the effectiveness of individualizing student learning. The participants in the collection of empirical material were selected and the samples were formed for the experimental programme to test the AI impact on the individualization of the educational process. Consultations were held with foreign language teachers, psychologists, and translators to methodologically substantiate

the study. The components of the effectiveness of learning a foreign language were determined — listening, reading, writing, speaking. The following main subjective parameters that affect academic performance were determined: anxiety and structural components of intelligence. These components were selected based on the principle of unity of the emotional and rational components of the psyche. The research hypotheses were determined: a) indicators of cognitive and emotional structure are related to the criteria for the students' performance in learning educational material in a foreign language; b) the AI use to individualize the educational process contributes to improving performance in learning a foreign language. The duration of the stage is two months.

The stage of collecting empirical material involved the use of diagnostic methods for subjective parameters of students' personality. The criteria for the success of studying a foreign language by students were also determined. At this stage, preliminary statistical conclusions were made based on the calculation of correlation coefficients. The duration of the stage is one month.

Experimental stage. Based on the collected empirical data, the groups were formed to exercise a formative influence. The experimental factor is the technology of using AI in studying a foreign language by students, which took into account their individual needs. The participants could refuse to participate in the experiment. This is provided for in the informed consent to participate in the study. The duration of the stage is seven months.

4. The data analysis stage. The performance indicators of students learning English obtained at the beginning and at the end of the experimental programme were compared. The statistical significance of the identified statistical differences was determined. The duration of the stage is one month.

3.1 INSTRUMENTS

The test methods were used to achieve the aim and test the hypothesis of the study. Diagnostics of the intellectual structure of the

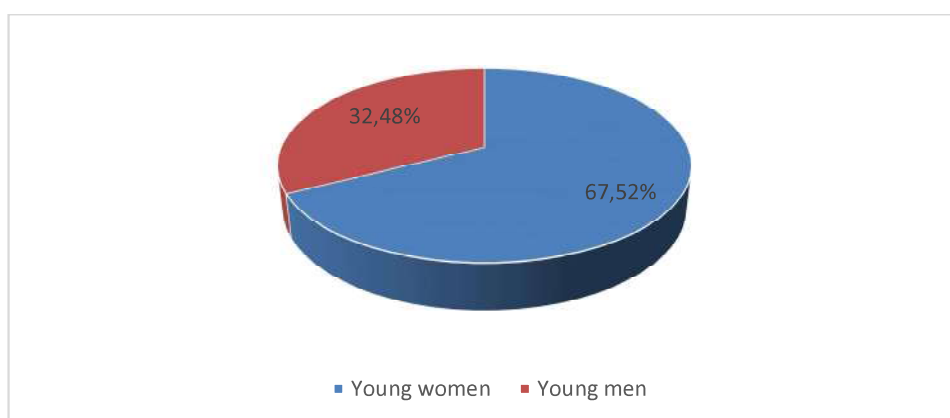
personality was carried out on the basis of the Amthauer Intelligence Structure Test (IST). This test determines nine parameters of thinking, imagination, and memory of students. The method has a valid adapted Ukrainian version (Polishchuk, 2023). The Taylor Manifest Anxiety Scale (TMAS) diagnoses the level of balance and calmness of the student during his/her activity (Taylor, 1953). The tests meet psychometric requirements, which is reflected in other studies. Based on observation and expert evaluation, a programme for assessing the components of studying a foreign language by students was developed. Such parameters as listening, reading, writing, and speaking of the research participants were studied from the standpoint of compliance with three levels — high, medium, and low. Visual indicators of the

manifestation of each level of performance in studying the subject were described in detail.

3.2 SAMPLE

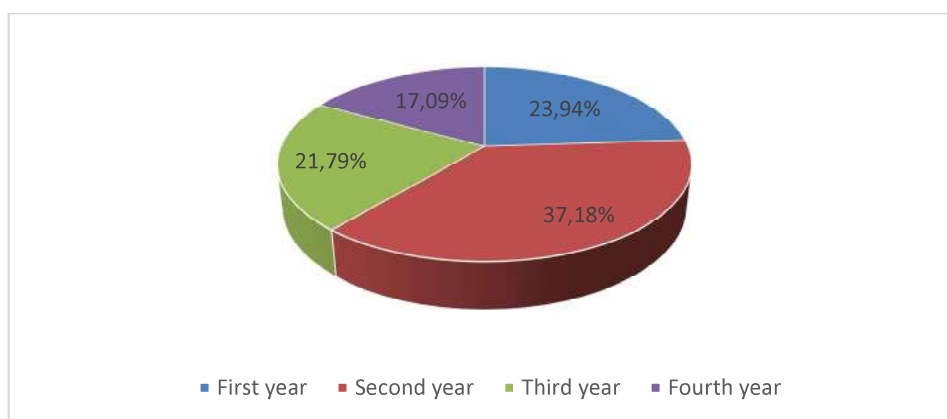
A total sample of 234 people was formed for the study to obtain representative data. First, the lists of students with a total number of 1,200 people were formed. This was followed by applying a random sampling method by using a randomizer to select a number of students, which constitutes a quarter of the population. The sample included bachelor's degree students studying a foreign language from the HEIs in Kyiv, Kharkiv, Zhytomyr, Cherkasy, and Vinnytsia. The gender distribution of the sample, as well as the distribution of students by year of study, are presented in Figure 1 and Figure 2.

Figure 1 – Gender distribution of the sample



Source: Developed by the authors (2025).

Figure 2 – Distribution of the sample by years of study



Source: Developed by the authors (2025).

Gender distribution of the sample: 158 young women and 76 young men. Distribution of the subjects by course of study: 1st year — 56 students; 2nd year — 87 students; 3rd year — 51 students; 4th year — 40 students. To conduct the experiment, two groups were formed based on the total sample (234 people) — experimental (40 people) and control (40 people). The experimental group (EG) studied with an individualized learning programme using AI. The control group (CG) was trained using traditional methods with the AI use. The samples were formed from students of the Faculty of Trade and Marketing of the State University of Trade and Economics. This approach was implemented for the convenience of testing the experimental programme, as it was easier for teachers to interact with students. The sampling met ethical criteria.

The data were collected online using Google Forms. This ensured the convenience and mobility of the process. Specialists in the field of psychology were involved. Therefore, the testing was methodologically grounded. The same applies to the diagnostics of the criteria for the success of foreign language learning by students.

The experimental procedure was based on a standard scheme for research on the AI use in the educational process (Chernenko, 2024). The dependent variable was the students' success in learning foreign language educational material. The independent variable was the AI-based individualized learning programme taking into account data on the development of students' subjective parameters. The formative experiment was implemented during training sessions with the EG members. Both general AI resources (ChatGPT) and specialized tools (Twee, MagicSchool) were used. The pro-

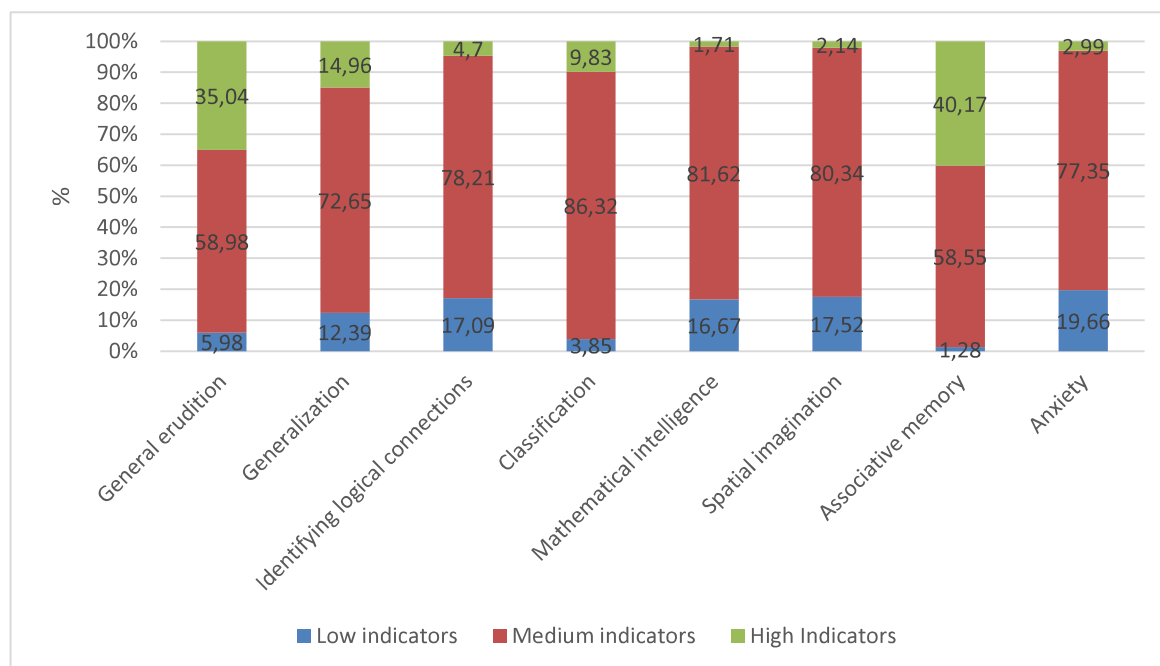
cedure for exercising the formative influence: AI is given the parameters of the intelligence and emotional sphere of a particular student, which were determined in the empirical study. Based on these data, foreign language assignments on the appropriate topic and level of complexity are formed. The individual programme is implemented with the teacher's support. So, AI ensured that the students' individual needs in the educational process of the EG were taken into account. Such training was carried out for half a year. The CG students were learning a foreign language without the AI use. The psychological and pedagogical experiment on the use of AI in foreign language learning was carried out by the authors of the study.

The data analysis is aimed at testing research hypotheses. The Pearson correlation analysis tested the assumption about the relationship between the structure of intelligence and manifestations of the emotional sphere with students' academic performance in learning a foreign language. Student's t-test was used to determine the dynamics of improving listening, reading, writing, and speaking in a foreign language in the EG. The data were processed using SPSS Statistics.

4 RESULTS

The results of conducting an empirical study and implementing an experimental one are presented in diagrams and tables. In particular, Figure 3 demonstrates the level of development of cognitive and emotional indicators as the basis of students' individual learning style. The identified empirical trends are described below.

Figure 3 – Indicators of the parameters of the emotional and cognitive sphere of students of the studied sample



Source: Developed by the authors (2025).

In general, the medium indicators prevailed in the studied students for all subjective parameters. So, medium values of general erudition were found in approximately 58.98% of the respondents. High values of this intellectual feature are characteristic of 35% of the students. A more pronounced shift to central values is observed in the intellectual operation of generalization (72.65%). High ability to identify logical connections is characteristic of only 4.7% of the studied students. Low indicators are more pronounced compared to the development of verbal generalization. The medium ability to verbal classification is significantly expressed (86.32%). The group almost does not have students with a high level of mathematical intelligence and spatial imagination. Associative memory is best developed among the members of the studied sample — a high level was diagnosed in 40.17% of the students. Anxiety tendencies in student age reflect manifestations of the emotional sphere of the personality. High-level manifestations of this emotional reaction are minimally represented. Medium indicators are the most pronounced, which are characteristic of 77.35% of respondents. A low level of anxiety is characteristic

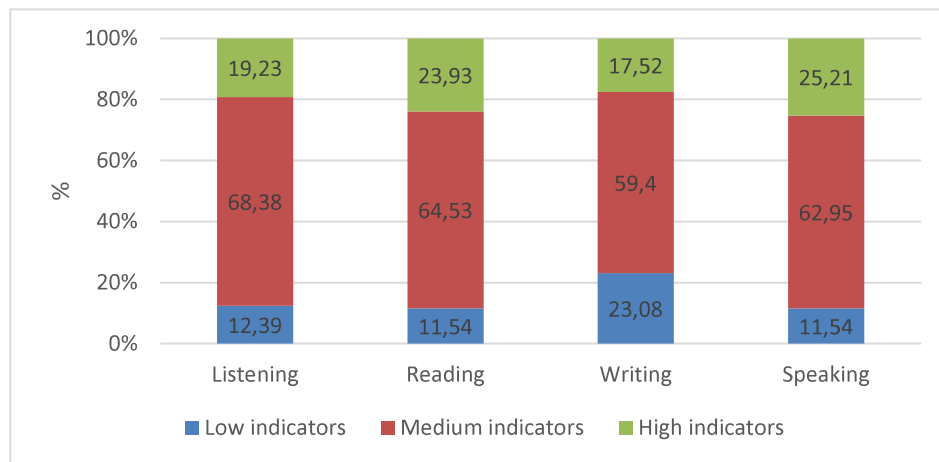
of almost 20% of students. So, the studied students can be characterized as those who have mainly medium indicators of verbal intelligence, moderate manifestations of anxiety and self-control.

Figure 4 demonstrates the level of success of studying a foreign language of the studied students. All the studied parameters are mainly developed at the medium level. Listening comprehension and understanding oral speech is qualitatively formed in almost 20% of the respondents. Approximately 68% recorded medium indicators of this ability. This is manifested in the fact that in general, students qualitatively perceive a foreign language, but there are cases of misunderstanding of individual words and word combinations. A low level of listening is characteristic of approximately 12% of the studied students. This implies a systemic misunderstanding of a foreign language. Similar trends were found for the reading parameter. However, a slightly higher percentage of high indicators was recorded for this component. A high level of this ability implies systematic, correct pronunciation when reproducing text fragments. Accordingly, the medium and low levels are characterized by a

different proportion of errors and concentration when reading foreign texts. The level of development of the written component of success is characterized by the number of grammatical errors of students. A low level of writing skills in a foreign language is characteristic of approximately 23% of the studied students.

Almost 60% showed medium indicators of this component, which reflects the episodic correctness of written reproduction of the text. A quarter of the studied students showed high indicators of speaking. This component of success in learning a foreign language is the most qualitatively developed.

Figure 4 – The levels of the components of the success of studying a foreign language by higher school students



Source: Developed by the authors (2025).

A correlation analysis was conducted to test the research hypothesis about the relationship between the individual personality structure and the success of learning a foreign language. The results of the correlation analysis are presented in Table 1. No significant relationships were found between the components of success and such cognitive parameters as classification, mathematical intelligence, and spatial imagination. The listening component has significant relationships ($p = 0.01$) with general erudition, generalization, and associative memory. The reading parameter has significant correlation coefficients ($p =$

0.01) with generalization, identification of logical connections, and memory. Writing ability is related only to students' associative memory ($p = 0.01$). The speaking component is most closely related to individual characteristics. Significant relationships of this parameter ($p = 0.01$) are recorded with general erudition, verbal generalization, ability to understand logical structure, associative memory. There is also an inverse relationship between speaking a foreign language and anxiety. So, the level of emotional calm is associated only with the effectiveness of foreign language communication.

Table 1 – The correlation between the students' individual characteristics and components of English language learning success

Students' individual characteristics	Components of academic performance in a foreign language			
	Listening	Reading	Writing	Speaking
General erudition	0.209**	0.112	0.029	0.287**
Generalization	0.201**	0.223**	0.043	0.334**

Identification of logical connections	0.049	0.284**	0.095	0.263**
Classification	0.041	- 0.045	0.004	0.003
Mathematical intelligence	0.005	0.003	0.003	- 0.034
Spatial imagination	0.003	0.066	- 0.090	0.024
Associative memory	0.234**	0.209**	0.222**	0.199**
Anxiety	- 0.032	0.002	- 0.112	-0.343**

Source: Developed by the authors (2025).

The obtained empirical research data were used as the basis for a formative experiment. For example, the AI instruction discussed ensuring an appropriate emotional atmosphere when performing speaking exercises. The development of relevant cognitive functions related to the success of learning a foreign language was discussed separately. For example, if insufficient generalization was identified in

the foreign language learning programme, the generation of AI tasks aimed at developing this operation was provided. The results of the formative experiment using AI are shown in Table 2. Confirmation of the previous conclusions involved the use of the Student criterion to determine qualitative differences in the indicators of academic performance in a foreign language (Table 3).

Table 2 – Dynamics of the components of students' success in learning a foreign language under the experimental use of AI

Components of academic performance in a foreign language	Development levels	Respondents							
		CG				EG			
		Before the experiment		After the experiment		Before the experiment		After the experiment	
		%	Q-ty	%	Q-ty	%	Q-ty	%	Q-ty
Listening	Low	12,5	5	10	4	15	6	7,5	3
	Medium	67,5	27	50	20	65	26	35	14
	High	20	8	40	16	20	8	57,5	23
Reading	Low	12,5	5	10	4	12,5	5	2,5	1
	Medium	65	26	60	24	65	26	30	12
	High	22,5	9	30	12	22,5	9	67,5	27
Writing	Low	25	10	25	10	25	10	5	2
	Medium	57,5	23	55	22	60	24	45	18
	High	17,5	7	20	8	15	6	50	20
Speaking	Low	12,5	5	7,5	3	12,5	5	5	2
	Medium	65	26	40	16	62,5	25	32,5	13
	High	22,5	9	52,5	21	25	10	62,5	25

Table 3 – The value of Student's t-test for the components of academic performance of foreign language students

Components of academic performance in a foreign language	Student's t-test	
	CG	EG
Listening	2.457*	3.518**
Reading	1.401	3.342**
Writing	1.691	3.301**
Speaking	3.232**	3.882**

Source: Developed by the authors (2025).

The effectiveness of the conducted formative experiment is analysed below. Positive dynamics of students' listening were revealed in both groups. However, changes in understanding a foreign language are more pronounced in AI-based individualized learning. In particular, this is confirmed by a higher percentage of individuals with a high level and the coefficient of the Student's t-test. No significant positive changes were found for the Reading parameter in traditional learning. At the same time, a significant increase in the indicators of a high level of reading in AI-based individualized programmes for learning a foreign language is recorded. Similar trends were recorded for the Writing parameter, where increased percentage of individuals with high indicators of the component is recorded. No significant differences were found for the Speaking component between the CG and EG. This means that traditional forms of learning are also effective for the development of this component of academic performance in a foreign language. In general, it can be stated that the AI use to adapt educational materials in foreign languages to individual needs is effective.

5 DISCUSSION

So, the results of the empirical study indicate that students studying a foreign language have medium success rates. At the same time, the ability to speak a foreign language is the most developed. Comprehension and reading are moderately developed. The writing component has the lowest level of development. The

most significant individual property of students for studying a foreign language is the ability to draw conclusions, identify logical patterns, as well as associative memory. It was established that anxiety affects the effectiveness of foreign communication. The conducted formative experiment demonstrated that the AI use is effective for adapting educational materials to the individual characteristics of higher school students in studying a foreign language. However, this is possible only if the teacher participates in the educational process. In particular, this is important for establishing effective feedback in educational communication with the AI system (Ayotunde et al., 2023). We also confirm the need to create a positive social climate in the process of realizing the capabilities of "smart" technologies (Xu, 2021). In general, we confirm the positive impact of AI on the training of future specialists (SLIMI, 2023). When used correctly, AI technology can optimize teaching and stimulate success (Cano; Troya, 2023).

Therefore, we agree with the opinion about the positive impact of AI on personalized education taking into account the students' personal characteristics (Saravana Kumar, 2019). We also agree with the opinion about improving students' academic performance in the context of learning a foreign language with the involvement of modern technologies (Karataş et al., 2024). The basic directions of using AI in higher education (Crompton; Burke, 2023) include the individualization of the educational process. The identified problem requires proper ethical justification (Androschuyk; Malyuga, 2024), especially in the context of maintaining data confidentiality and

the impact of computer interaction on the personality. At the same time, assessing students using AI requires improvement, which contradicts the opinions of other researchers (Maphosa; Maphosa, 2023). It is also appropriate to study the specifics of the application of AI in distance education (Seo et al., 2021).

5.1 LIMITATIONS

The obtained results have some limitations. The randomization procedure was not applied before the formation of the EG and CG. It is also advisable to compare the individualization of foreign language learning using AI and through traditional educational planning.

The obtained data give grounds to provide recommendations for the use of AI in the process of studying a foreign language by students:

- a) mandatory psychological diagnostics in order to clarify the students' individual characteristics;
- b) embedding not only the level of complexity of the educational content of the subject in AI algorithms, but also the strategy of communicative interaction with students;
- c) increasing the teacher's competence in using AI in the educational process of HEIs;
- d) constant analysis and correction of the effects of AI on the effectiveness of foreign language learning by students;
- e) providing the possibilities of using AI for learning a foreign language in educational programmes.

6 CONCLUSIONS

The study found that students studying a foreign language have medium success rates. At the same time, the ability to speak is the most developed, while the ability to listen and read is not sufficiently developed. The lowest level of development is observed for the Writing component. The ability to generalize, identify logical patterns, and associative memory are the most significant for students learning a foreign language. It was found that anxiety affects the effectiveness of communication in

a foreign language. The conducted formative experiment demonstrated that the AI use is effective for adapting educational materials to the individual characteristics of students in studying a foreign language. However, this is possible only provided the teachers' participation in the educational process. There is a progress for all components of students' success in studying a foreign language. At the end of the study, high listening scores in the EG increased by 37.5%; reading — by 45%; writing skills — by 35%; speaking — by 37.5%. The main conditions for the effectiveness of using AI for teaching a foreign language are effective feedback, creating a positive atmosphere of interaction, the teacher's competence in using modern technologies, and the availability of material on the development of students' cognitive abilities. The results of our study create the basis for generating high-quality individualization of foreign language learning using AI. The prospects for further research are to compare the effectiveness of algorithms for applying AI in the professional training of students of different majors.

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Recebido em 06 de fevereiro de 2025

Aceito em 30 de junho de 2025