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# THE USE OF ARTIFICIAL INTELLIGENCE TOOLS FOR MONITORING LEARNERS' LANGUAGE LEARNING PROGRESS IN NON-LINGUISTIC HIGHER EDUCATIONAL ESTABLISHMENTS

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***Summary.*** *In the context of the digital transformation of higher education, artificial intelligence in education (AIEd) provides opportunities for the automated monitoring of students' learning achievements, particularly in the process of foreign language instruction. The work highlights the main models of pedagogical interaction within the "teacher–AI–learner" framework; analyzes the impact of AI tools on the development of key language competencies; examines the monitoring of students' learning progress through AI-based technologies as well as identifies prospects for the further development and application of AI technologies in foreign language education.*
*It is argued that the selection of AI-based assessment tools is determined by two interrelated criteria: the degree to which AIEd is employed as a pedagogical agent and the manner in which AI-supported guidance is adapted to learners' individual needs. The study explores the potential of AI for monitoring the development of students' language competencies during foreign language learning, particularly in the areas of automated assessment of writing, reading, listening, and real-time language performance. It is concluded that the effective implementation of AIEd as a means of monitoring students' learning achievements in foreign language acquisition is primarily a pedagogical rather than a technical decision. Its use depends on the level of educator's professional competence and the choice of a pedagogical interaction conceptual model.*

***Keywords:*** *artificial intelligence in education, language education, pedagogical interaction, monitoring academic progress, learner, foreign language competence.*

Statement of the Problem. The integration of artificial intelligence into education (AIEd) is aimed at addressing the challenges facing educational science: meeting the needs of learners, selecting learning content, developing learners' agency in the learning process, and the like. However, the use of AIEd does not guarantee high-quality learning or better educational outcomes. The main obstacle to the effective use of AIEd is the conceptual gap between modern technologies and studies focusing on the impact of AI on the development of specific language skills [2;11].

At the same time, the integration of AIEd in non-linguistic higher educational

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establishments advances fostering learners' communicative competences by means of automation of monitoring students' learning achievements, thus, allowing the adjustment of students' learning trajectories in foreign language acquisition [2]. The relevance of this article is justified by the understudied impact of AI on monitoring students' academic progress in the educational process of learning foreign languages.

Research Objective. The aim of this article is to provide a theoretical basis for and explore the potential of AIEd as a powerful tool for transforming modern language education, with a particular focus on its characteristics regarding the personalisation of learning, the automated monitoring of learners' academic progress.

To achieve the stated aim, the following tasks are to be performed:

- to describe the main models of pedagogical interaction 'teacher–AI–learner';
- to analyse the impact of AI tools on the development of key language competences;
- to explore the possibilities for monitoring learners' learning progress using AI;
- to identify prospects for the further development and use of AI technologies in foreign language teaching.

Analysis of Research and Publications. The introduction of AIEd, particularly, into foreign language learning has led to the emergence of advanced frameworks, such as Computer-Assisted Language Learning (CALL), Intelligent Computer-Assisted Language Learning (ICALL) and Mobile-Assisted Language Learning (MALL). In English language teaching, traditional approaches such as Teaching English as a Foreign Language (TEFL), Teaching English as a Second Language (TESL) and Teaching English to Speakers of Other Languages (TESOL) have significantly expanded the possibilities for monitoring learners' language-acquiring progress through the real-time analysis of their language competences, providing personalised feedback and adaptive learning trajectories [15; 16].

Presentation of the Main Material. In the digital transformation in education, AI is becoming a powerful tool for assessing and measuring learners' academic achievements; however, its implementation depends on the conceptual model chosen.

According to P. Mishra and M. Köehler, creators of the TPACK (Technological Pedagogical Content Knowledge) model, effective AIEd integration requires educators to master content, pedagogy, and technology within the learning environment. The TPACK model was introduced for educator professional development. The model examines AIEd at theoretical, pedagogical, and methodological levels as well as refers AIEd as a tool for optimizing learning process and automating routine processes such as assessment and academic integrity verification [13]. The study by İsmail Çelik suggests the Intelligent-TPACK model, which extends the TPACK framework with ethical aspects for the effective implementation of AIEd. The findings indicate that combining technological knowledge with pedagogical knowledge is critical for evaluating AI decisions and successfully integrating tools into the learning process [6].

The D-PACK (Digitality Related Pedagogical and Content Knowledge) model,

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also known as the Frankfurt Triangle (German: Frankfurt-Dreieck), is a European interdisciplinary framework for digital literacy that assesses AIEd integration through three equally important perspectives: the technological dimension (e.g., avoiding algorithmic bias), the socio-cultural dimension (e.g., ethical use of personal data and equality), and the practical-interaction dimension (e.g., fostering critical thinking and creativity) [5].

UNESCO's global model for AIEd, namely, 'AI Competency Framework for Teachers' is based on a human-centred approach and transforms the traditional 'teacher–learner' interaction into a new dynamic model of 'teacher–AI–learner' interaction [17].

In Ukrainian educational discourse, the above-mentioned models correlate with the 'Framework for the Digital Competence of Teaching and Research Staff' [23]. The model focuses on the use of AI for developing critical thinking, media and digital literacy among learners [7], as well as on analysing the ethical aspects of using AI in the process of monitoring learners' academic achievements.

To achieve the aim of our study, it is worth considering the triparadigmatic model of AIEd application [12; 14] based on the following criteria, namely, levels of learning support and adapting this support to learners' individual needs. The model examines three paradigms for the use of AIEd in the pedagogical interaction 'teacher–AI–learner': AIEd as the 'architect' of the learner's educational trajectory (AI-directed Paradigm); AIEd as a 'smart assistant' (AI-supported Paradigm); AI as a 'facilitator' of the learner's intellectual potential (AI-empowered Paradigm). In line with this approach, scholars classify AIEd according to specific features depending on the research objective, functional capabilities, or technological basis [18]. Furthermore, this model also takes into account a variety of learning style modes, which is particularly relevant for the monitoring of learning outcomes, as it allows for the continuous monitoring learners' academic progress and the identification of gaps in their communicative competences.

Notably, recent advances in AIEd enable the automatic identification of learning styles based on learners' digital trace data, such as forum participation, video viewing habits, and navigation logics. For instance, the GRL-LS technique can be used to categorise learning style modes, in particular, visual/verbal learners: visual learners absorb information more effectively through images, diagrams and graphs, while verbal learners use more written materials and make use of discussion forums for communication; active/reflective learners: active learners are more likely to post on forums to discuss and explain course material, while reflective learners prefer to read posts passively without making their own active contributions; sensitive/intuitive learners: sensitive learners focus on a detailed analysis of learning resources, while intuitive learners prefer abstract materials and universal concepts, spending more time reflecting on them; sequential/global learners: sequential learners absorb material linearly, while global learners take in information in a haphazard manner but, once they have accumulated enough resources, suddenly grasp the whole picture [1].

Before proceeding to examine the AI tools to monitor learners' academic progress, it is important to discuss each paradigm of the triparadigmatic model of AIEd application based on pedagogical interaction of its main agents [12; 14; 21].

The paradigm of 'AI as the "architect" of the learning trajectory' reflects a model

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in which an AI coordinates and controls the educational process, while the learner primarily acts as a recipient of the structured content and an instructions' follower. The paradigm is grounded on behaviourism, that is, learning objectives are decomposed into sequential stages, accompanied by algorithmically generated feedback. Educational interaction takes the form of an algorithmically controlled environment, where the AI acts as a 'digital tutor' that monitor learners' progress and competency development. The described paradigm AI tools are characterised by a high degree of control over the learner's educational trajectory and content adaptation and task complexity. Examples of such AI tools include drill-and-practice programmes, as well as programmes based on the SOAR Cognitive Architecture [12;14].

Accordingly, within the paradigm of "AI as an architect of the learning trajectory," the monitoring of learners' academic progress can be supported by such classes of AI systems as automated testing systems, Computerized Adaptive Testing (CAT), Automated Essay Scoring (AES), Automated Writing Evaluation Systems (AWES), Intelligent Tutoring Systems (ITS) with embedded competency-monitoring functions (e.g., ACT Programming Tutor), Google tools [3].

The advantages of these AI systems include rapid automated assessment (just-in-time assessment), which provides immediate feedback and thereby reinforces the active learning cycle and improves knowledge retention; the reduction of assessor bias as well as a reduction in educators' workload.

The 'AI as an "architect" of the learning trajectory' paradigm envisages a model in which artificial intelligence acts as the primary coordinator and regulator of the educational process, whilst the student assumes the role of a recipient of structured content and a follower of established instructions.

A key advantage of this role for AI is its ability to adapt to learners' individual learning styles (active/reflective, sensitive/intuitive, sequential/global) and adjust the presentation of material, the pace of lessons, the types of tasks, and the methods of feedback accordingly. This allows for the creation of a personalised learning trajectory that best suits a learner's learning style, enhances the effectiveness of knowledge acquisition, and facilitates more in-depth monitoring of academic progress.

The scientists also note that modern generative AI and specialized agents are able not only to adapt the content, but also to support the metacognitive development of students. Unlike classical systems like Cognitive Tutor, which were driven by rigid knowledge bases, generative solutions support open dialogues, explanations, and reflection — which significantly expands the understanding of the framework of the 'AI as an "architect" of the learning trajectory' paradigm.

Quasi-experimental studies show convincing quantitative results. Learners who studied with the support of AI systems consistently showed higher results compared to their peers in the control groups: the increase in academic performance ranged from 15 to 35% on final assessments. An increase in engagement and satisfaction with learning was also recorded with the use of electronic learning, such as ChatGPT, Squirrel AI, and the like. Their use has facilitated personalized learning, real-time feedback, and adaptive assessment. Learners who worked with hybrid AI models improved not only test scores, but also motivation and

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conceptual understanding of the material.

Mixed design studies confirmed the general trend, albeit with slightly less ambiguity: academic performance improved in the range of 20–30%, and strong correlations between the use of AI tools and positive learning outcomes were recorded. The results from tools that combined gamification, virtual assistants, and interfaces in the native language were especially convincing.

The paradigm of the AI system as a 'smart assistant' in the pedagogical interaction between the learner and the AI system is based on human-centred and personalised approaches. Within this paradigm, the AI system acts as an intellectual assistant that supports the learner's agency. The paradigm is based on the principles of cognitive and social constructivism; therefore, the language competence acquisition occurs when the learner interacts with people, information and technologies in socially determined contexts. The learner is an active participant in the interaction with the system, formulates critical research queries, analyses algorithmic solutions, selects cognitive strategies and consciously self-regulates their learning trajectory. AI-tools continuously monitor and analyse personalised data to model the learner's profile. Based on this analytical data, AI adjusts the nature of tasks, the pace of the learning process and the level of didactic support, provides monitoring learner's language-acquiring progress in real time and outlines an individual learning trajectory [12;14].

Within the framework of the 'AI as a "smart assistant" for monitoring learners' language-acquiring progress, it is advisable to apply the following AI tools, such as electronic assessment platforms (EAPs) such as Assessment and Learning in Knowledge Spaces (ALEKS), conversational agents (chatbots) for dialogue-based assessment (CBA), Beverly Wolf's intelligent learning systems (tutors), which create a collaborative and research-oriented educational environment, AI-assisted peer assessment; formative peer assessment.

The study of the corelation between 'teacher–AI–learner' interaction and learners' academic performance has found that leaners turn to AI-tools to perform routine tasks. The level of learners' satisfaction with the use of AI-tools does not depend on the volume of interaction, but on the complexity of the task. Research discovered that most learners believe that their academic success depends on the frequency of their interaction with AI. Learners experience more academic progress when they use AI-tools more often. On average, the duration of language training ranged from 2-8 hours per day, but there was no direct relationship between the number of hours and academic performance. Since some s leaners who studied for more than 12 hours had relatively low academic performance. The highest results are achieved when 4-6 hours of training are combined with an "average" level of AI use.

The findings of scientists indicate that the frequency, volume, duration of the interaction 'teacher–AI–learner' according to the criterion of interaction intensity are not the main indicators of academic success; the effectiveness of interaction largely depends on the quality of AI use. Scientists predict that in the future the frequency of interaction 'teacher–AI–learner' will increase.

In particular, researchers note that such platforms as Pigai, Grammarly and Criterion embody the general characteristics inherent in most AWE systems. Existing

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research focuses primarily on evaluating the effectiveness of these AWE systems, the impact of the three systems on the development of writing skills, and users' attitudes towards AWEs. The systems perform various functions and cater to users' needs, taking into account their cultural background, level of education and other factors. For example, Pigai is aimed at native Chinese speakers, Grammarly serves individual users, and Criterion is mainly used in the educational process and during testing. Scholars emphasise that, despite certain shortcomings of AWES, there is a consensus among educators regarding the importance of integrating AWES tools into the educational process.

However, some researchers argue that the integration of generative AI, in particular, ChatGPT-4 and Gemini, into the evaluation of learners' written works requires a cautious approach, taking into account ethical risks, including potential bias and lack of transparency. The findings revealed significant limitations on the reliability of generative AI compared to experienced expert educators. Scientists note that generative AI demonstrates high potential as a formative assessment tool, providing prompt feedback, which is especially important for large study groups and can reduce educators' workload and devote their tome to give high-quality meaningful feedback. Another important AI characteristic is that AI-tools process large arrays of texts, thus, it contributes to educators' monitoring language acquisition. Since educators can identify common learners' mistakes, for example, grammatical inaccuracies, stylistic flaws on the grounds of AI-generated data [8; 9].

Adaptive learning environments use contextual data about the learner to select the most relevant tasks and learning materials. For example, the ALEKS AI system starts with an individualized initial assessment, which usually contains 20-30 tasks to determine the learner's level. The assessment is adaptive because the next task depends on the answer correctness to the previous one. After the first assessment, the learner receives a report in the form of a pie chart, where each sector corresponds to a specific topic of the curriculum. A darker shade in the sector shows how well the applicant has mastered the topic. Having determined the first level of training, ALEKS lists topics, which the learner is prepared to study. Then the learner receives a set of tasks within a specific topic. For each task, there is an "Explanation" button, which provides an example solution with detailed comments. The learner has the choice to study the topic independently or use the sample with the explanations. The system determines the topic mastery level and updates learner's learning trajectory providing the level diagram. As the learner's preparation level changes, new topics are added to the list to study. In addition, ALEKS periodically conducts repeated assessments, to adjust the learner's profile. Therefore, based on the diagnostics results, ALEKS creates learner's competency profiles, on the basis of which it carries out adaptive modelling and educational content personalization.

Computerized Adaptive Testing (CAT) can be divided into international tests and the latest platforms using AI and large language models (LLMs). CAT is aimed at assessing learners' outcomes on the AI base. CAT adjusts the questions complexity level according to the learners' answers in real time. This AI-tool provides high accuracy in measuring language competencies as it uses fewer questions compared to traditional tests, reduces testing time and improves a learner's experience. CAT is

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used in standardized assessments. In particular, the StudyCAT educational project at Toronto University is aimed at creating a CAT tool for formative assessment with a visual display of a learner's competences and operational analysis of his or her problem areas to determine the areas of immediate development.

The Duolingo English Test (DET), also uses a CAT system that integrates AI to generate and calibrate new tasks in real time and guarantees the validity of the results.

Modern AI systems use large language models (LLMs), neural networks, and cloud technologies. Research on the use of conversational agents (chatbots) for dialogue-based assessment (CBA) prove that conversational agents are suitable for current (formative) assessment, since they record the response correctness as well as accompany the learning process with interactive feedback. CBA combines the measurement of skills (including cognitive, communicative, and emotional) with knowledge, skills, and abilities evaluation.

A key advantage of this paradigm is the AI tools can identify dominant learning styles (active/reflective, sensitive/intuitive, sequential/global) and improve the learner's learning trajectory by monitoring of language development progress and providing personalised recommendations for adjusting the learning trajectory.

Within "AI as a 'facilitator' of the learner's intellectual potential" (AI-empowered Paradigm) paradigm, the learner is the agent of learning and the knowledge acquirer. The paradigm is originated from complexity theory, which views education as a complex, adaptive, interconnected system and envisages a transition to the concept of augmented intelligence. Hence, AI-tools are part of a cooperative ecosystem that takes into account the synergistic collaboration between many components, such as the learner, the educator as well as information and technology. To achieve synergy, the concepts of human-machine cooperation and human-centred AI are applied. The learner acquires educational experience to conduct complex research, generate non-standard ideas, solve highly complex problems and engage in reflection. Driving factors of this paradigm are AI-based monitoring tools to develop a learner's creativity and critical thinking, simultaneously transforming from a knowledge seeker into an innovation creator.

Main AI-tools for learner's language-acquiring progress are grounded on neurotechnologies to create a learner's cognitive profile; knowledge tracking systems to reflect the level of knowledge acquisition or level of competence mastery by identifying gaps in learning, AI-tools based on Brain–Computer Interfaces (BCIs) to adjust the complexity of learning tasks in real time, for example, simplifying programming tasks when a high level of frustration is detected and automatically generating new tasks.

Thus, assessment tools within this paradigm go beyond conventional tests, offering a combination of biometric data, dynamic knowledge modelling and automated content generation to create an adaptive learning environment. In particular, the LEAP (LEArning Path Quality Assessment and Personalisation) framework is an example of such an approach. LEAP monitors a learner's learning trajectory across three dimensions: topological coherence; adaptation of difficulty; and prediction of errors in mastering the material. The study shows that LEAP outperforms standard assessment methods by 7–13% [19].

Data mining and feedback allows teachers to gain operational insights into

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learners' behavior and predict their outcomes. Emotion recognition systems and success prediction models make it possible to adjust the learning process in a timely manner. In the context of higher education, AI-tools are increasingly used to keep learners engaged in the educational process. In particular, intelligent tutor systems and adaptive learning platforms personalize the delivery of educational material in accordance with the learners' academic progress. The AI-tools identify knowledge gaps and provide individual feedback, stimulating deeper understanding and long-term intellectual activity.

The use of natural language processing technologies, including chatbots and automatic writing grading systems, promotes both learners' behavioral and emotional engagement by creating an interactive learning environment. For example, virtual simulation games immerse students in the decision-making process, increasing both the level of participation and satisfaction with task completion.

Despite the significant potential of using AI tools in the educational process, research proves that their effectiveness depends on compliance with local educational needs and regulatory requirements. For example, diagnostics of such educational AI platforms as Khanmigo, CENTURY Tech, MATHia, Knewton Alta, AltSchool, Querium, Squirrel AI according to the UNESCO methodology showed that none of the platforms was recognized as fully ready for implementation without additional adaptation. Consequently. scholars emphasize the need to critically evaluate the educational context of the AIEd application [10].

To summarize, the effectiveness of using AI systems largely depends on the level of digital competence of the teacher, their professional competence to monitor the learner's progress and avoid excessive trust in the recommendations of AI systems, that is, to maintain a balance between technological support for AI as an evaluator and the educator's expert assessment.

The following part of this paper moves on to describe in detail the impact of AI tools on the development of key language competences and to explore the possibilities for monitoring learners' learning progress using AI-tools.

Monitoring learners' language competence acquisition is measured by two criteria, namely, learning productivity, both quality (goal achievement) and quantity (learning pace); and alignment of automated and manual assessments (correlation, consistency, and bias). Thus, the indicators of language competence development are the following ones: test results comparison of pre- and post-test scores following the use of the AI-tools; learning activity analytics, that is, number of tasks completed, duration of interaction with the system, frequency of AI-tools use; automated feedback in terms of assessments or recommendations generated by the AI-system; achievement of learning objectives, that is, level completion; performance tracking (portfolio of learning outcomes: saved records of oral and written works); learners' engagement and motivation, that is, regularity of class attendance, completion of tasks.

*Speaking skills.* AIEd promotes speaking proficiency by improving pronunciation accuracy, speech fluency, spoken grammar, vocabulary use, as well as appropriate intonation and stress patterns [16].

The findings of integration such AI-tools as Google Assistant, Alexa, Mimic, ChatGPT, Duolingo Max and the like, demonstrated improvements in learners' speaking competence. For instance, the implementation of the Google Assistant

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application was particularly effective in improving EFL learners' fluency and interactive communication skills, pronunciation, vocabulary use, content relevance, and spoken grammar. Learners experienced language practice, access to learning resources, greater learner engagement and motivation, and support for self-directed learning. Research has also indicated improvements in *listening*, since listening is a base for effective oral communication [15].

*Writing skills.* The AI assistants in the writing learning process provide instant feedback on learner's grammar, style, punctuation, word choice and vocabulary. Thus, learners focus primarily on content and the development of ideas. The effectiveness of AI- tools, such as Grammarly for improving grammatical accuracy, style and clarity of text, as well as Quillbot and ChatGPT, has also been confirmed in academic research. In particular, scholars propose a graded assessment system that takes into account the extent to which AI is used when completing tasks. Scholars justify the need to combine written and oral assessment and define evaluation criteria that enable greater objectivity in assessing learning outcomes and promote the responsible use of AI.

*Reading skills.* Research suggests that humanoid robot tutors assist learners to enlarge their vocabulary. In addition, AIEd enhances reading comprehension through personalised texts up to the learner's proficiency level. The AI-tools analyse text complexity and customise reading content through leveraging natural language processing and adaptive learning technologies.

*Translation and interpreting skills.* The research findings indicate that the use of AI-tools significantly improves teaching practices and learning outcomes through monitoring learners' academic progress in key areas such as vocabulary enlargement. The AI-tools optimise translation accuracy, enhance the assessment quality, improve the recognition of linguistic nuances as well as contribute to the learner's learning satisfaction. The ability to receive accurate translations and real-time support makes AI a valuable resource for a learner's personalised monitoring.

Neural machine translation programmes significantly contribute to improving learners' vocabulary, particularly regarding terminology, which poses difficulties for learners. Furthermore, AI applications assist with translation tasks, generate automated feedback and, consequently, enable educators to monitor the competencies development in real time. As a result, educators focus more on the methodological aspects of teaching, while learners are given support with linguistic issues.

According to the recent research findings, the use of artificial intelligence tools in the development of language competencies, translation and interpretation does not properly take into account the cultural aspects of language learning. In particular, context-based vocabulary, idiomatic expressions, hidden in the oral or written texts emotions, such as, humour, irony, sarcasm and the like in real communicative situations. Such limitations can cause communication failures that lead to intercultural misunderstandings during direct interaction. In addition, the impact of artificial intelligence on learners' development such higher-order skills as critical thinking, text analysis, inference, and creative and imaginative writing, is investigated fragmentally [20, 22]. Although AI-tools are effective in improving learners' sub-competencies, namely, pronunciation, grammar, vocabulary, syntactic structure,

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they do not contribute in realizing the consequences of speech actions, avoiding offensive language, understanding the impact of words, and overcoming difficulties associated with communication failures.

Scientists report that AI does not much develop interpersonal communication and soft skills, in particular emotional intelligence. Modelling communication emotional components, such as, empathy, intonation, signals of non-verbal communication, is crucial for understanding the statement subtext, hence, AI-tools are not recommended to be used to monitor learners' progress to respond effectively to interruptions in conversation, insults, or difficult questions in real time interactions.

In line with the stated above, AI tools in translation and interpretation are unlikely to identify bias and discriminatory language, to recognize and resolve ambiguities, consequently, AI tools do not possess characteristics cultural sensitivity and make contextual interpretation by, for example, reproducing complex syntax as well as conveying metaphorical and figurative constructions.

Thus, despite the benefits of AIEd use in language learning, AI-tools are mostly applied to monitor learner's progress in assessing personalised learning by means of adaptive learning, automated assessment, personalized content creation. AI-tools for monitoring learner's language-acquiring progress could be ineffective to evaluate communication skills in group dynamics, negotiation, persuasion, collaborative work, ethical decision-making, leadership, and volunteering since AI-tools remain individual-centered.

On the one hand, AIEd has much potential in language education to enhance learner's communication skills, on the other, its potential is limited in intercultural interactions accompanied by emotional intelligence, and cultural competence. Such characteristics of intercultural interaction as cultural sensitivity, empathy, interpersonal communication, and critical thinking skills require human educator-engagement to monitor learner's academic progress.

Therefore, it is advisable to refer to AI-tools as technological devices aimed to improve language education based on traditional humanistic approaches but not to replace educators.

Conclusions and Recommendations. Thus, the synergy between the three AIEd paradigms, the multi-criteria classification of AI tools, and the incorporation of learning style modes gives grounds monitoring a learner's language-acquiring progress in speaking, reading, writing, listening skills

The prospects for the further development of AI technologies in teaching foreign languages are aimed at becoming a powerful tool for systematic monitoring of a learner's academic success. AIEd provides real-time tracking of a learner's progress, analyzing the dynamics of the language competencies development, predicting learning outcomes and providing deeply personalized adaptive support.

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# ЗАСТОСУВАННЯ ІНСТРУМЕНТІВ ШТУЧНОГО ІНТЕЛЕКТУ ДЛЯ МОНІТОРИНГУ НАВЧАЛЬНИХ ДОСЯГНЕНЬ ЗДОБУВАЧІВ ОСВІТИ У ВИВЧЕННІ ІНОЗЕМНОЇ МОВИ В НЕМОВНИХ ЗАКЛАДАХ ВИЩОЇ ОСВІТИ

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***Анотація.*** *В умовах цифрової трансформації вищої освіти штучний інтелект в освіті (ШІО) надає можливості автоматизованого моніторингу навчальних досягнень здобувачів освіти, зокрема у процесі іншомовної підготовки здобувачів освіти. У статті висвітлено основні моделі педагогічної взаємодії «викладач–ШІ–здобувач освіти»; проаналізовано вплив інструментів ШІ на розвиток ключових іншомовних компетентностей; досліджено моніторинг навчального прогресу здобувачів освіти засобами ШІ; визначено перспективи подальшого розвитку та використання технологій ШІ у навчанні іноземних мов. Обґрунтовано, що вибір інструментів ШІ-оцінювання визначається двома взаємопов'язаними критеріями, як-то: ступенем застосування ШІО як педагогічного та способом адаптації ШІ супроводу до індивідуальних потреб здобувачів освіти. Проаналізовано можливості моніторингу розвитку іншомовних компетентностей здобувачів освіти у процесі іншомовної підготовки, зокрема в аспектах автоматизованого оцінювання письма, читання, аудіювання й усного мовлення в реальному часі. Зроблено висновок, що ефективне впровадження ШІО як засобу моніторингу навчальних досягнень здобувачів освіти в процесі опанування іноземної мови є педагогічним, а не технічним рішенням, що залежить від рівня професійної компетентності викладача та вибору концептуальної*

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*моделі педагогічної взаємодії.*

***Ключові слова:*** *штучний інтелект в освіті, мовна освіта, педагогічна взаємодія, моніторинг навчальних досягнень, здобувач освіти, іншомовна компетентність.*

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