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Artificial Intelligence Technologies in English Language Teaching: Perspectives of Lecturers from Astana IT University and Karaganda Buketov University

The rising relevance of artificial intelligence (AI) in learning and the need to understand its scope thoroughly in English language teaching have made this research pertinent. Consideration of available AI technologies, their merits, shortcomings, and attitudes of English lecturers towards adopting AI technologies will assist in determining helpful strategies for their advancement and suitable integration into educational practices within the language teaching framework. Despite the rapid advancement of AI technologies and their active implementation in education, the practical experience of using AI in English language teaching remains insufficiently explored. Therefore, the research problem lies in the lack of empirical data reflecting lecturers' perceptions and attitudes towards such technologies and the analysis of their actual pedagogical potential within universities in Kazakhstan, specifically at Astana IT University and Karaganda Buketov University. This study aims to explore the use of modern AI technologies by English lecturers, their impact on educational process, and how educators perceive them. A quantitative research method was employed through a questionnaire involving English lecturers from Astana IT University and Karaganda Buketov University. Based on the collected data, conclusions were drawn regarding the current level of AI technology usage and implementation, lecturers' perceptions, and potential directions for future development.

Keywords: artificial intelligence, English language teaching, lecturers' perceptions, advantages and limitations of artificial intelligence, AI-based technologies, quantitative research, pedagogical potential of artificial intelligence, inter-university study.

Introduction

Nowadays, artificial intelligence is an integral part of English language teaching. As noted by Healey, "Artificial intelligence is a broad term used to describe a collection of technologies that can solve problems and perform tasks to achieve defined objectives without explicit human guidance" [1], [2]. In other words, these technologies enable modern lecturers to automate routine tasks, simplifying the teaching process and creating more effective learning sessions.

The use of artificial intelligence in English language instruction has several benefits. First, AI is essential to language learning, as it provides students with interactive resources to enhance their language proficiency. For example, scholars emphasize that chatbots offer significant advantages for learners, including their availability anytime and anywhere, access to broad language knowledge, and the role of "tireless assistants" in communication [3]. In this way, interactive platforms, chatbots, and voice assistants enable learners to develop all types of language skills conveniently. Secondly, AI technologies are capable of processing large volumes of data and quickly identifying errors, which makes the assessment of students' work much easier. Tools such as grammar and spell checkers not only correct mistakes but also provide explanations, helping students to understand language rules more clearly. Researchers also note that AI-based platforms support personalized learning by adapting materials to learners' interests and preferences [4]. This kind of individualization can increase motivation and engagement, since students receive assignments and content that are directly relevant to them. Another important feature of AI is its ability to provide immediate feedback through the rapid analysis of tasks such as tests and essays [4]. This enables teachers to track student progress more accurately, adjust instruction promptly, and address curriculum gaps. Modern technologies would also allow students to study English remotely, utilizing individualized learning plans [4]. For lecturers, this means avoiding repetitive delivery of the same material, as AI systems can adapt lessons to the needs of each student. As a result, the teacher's role increasingly shifts towards that of a mentor and guide, while routine tasks are handled by technology.

At the same time, the use of AI in education has apparent limitations and requires a balanced approach. These systems cannot replace a human teacher when it comes to encouraging creativity, critical thinking, and communication skills. Ethical concerns also remain, particularly in relation to the collection and use of students' personal data. For example, Mestari argues that AI models may unexpectedly lead to data breaches during the processing and storage of user information, often without explicit data privacy guarantees [5]. Therefore, the implementation of AI demands special attention to security and the protection of confidential information. In addition, modern technologies can perform various routine tasks traditionally handled by lecturers, which may result in a diminished role of educators as mentors and subject matter experts [4]. This results in a lack of pedagogical support and genuine human interaction, both of which are critical for students' personal growth. Equally significant is the danger that educational establishments could lose the human element in instruction if they become unduly reliant on technology in their quest for better learning outcomes [4]. As a result, there is a risky tendency for education to become less humane and less focused on fostering creativity, critical thinking, and interpersonal communication. To balance technological efficiency with the maintenance of pedagogical values and principles, incorporating AI into education thus necessitates careful consideration and analysis. It is crucial to carry out basic research in order to comprehend the changing roles of educators and create strategies for productive human-AI cooperation.

In the era of digitalization, an increasing number of AI technologies are emerging each year, and English lecturers are utilizing them to enhance quality and efficiency of educational process. In a study conducted by Yunina, these technologies can be categorized into several classifications [6]. For example, they include interactive language programs, adaptive learning platforms, automated assessment and feedback systems, chatbots, virtual assistants, and speech recognition technologies.

The first category includes programs such as "Duolingo" and "Babbel". "Duolingo" offers gamified lessons with short, interactive exercises that help develop communication skills and language comprehension in various contexts [6]. "Babbel" provides comprehensive lessons designed by language experts, focusing on practical language application [6]. These platforms enable English lecturers to diversify learning by practicing different language skills in various communicative situations.

Adaptive learning platforms include "Memrise" and "Mondly". The former uses mnemonic flashcards and real-life videos to personalize learning and adapt to students' individual needs [6]. At the same time, "Mondly" utilizes virtual and augmented reality technologies, as well as speech recognition, to create a personalized learning experience [6]. These technologies make the educational process more effective and engaging as they consider students' interests, motivating them to continue learning foreign languages.

Automated assessment and feedback systems include AI technologies such as "ELSA Speak" and "Grammarly" [6]. Each of these tools provides recommendations for improving pronunciation, grammar, spelling, and writing style [6]. Moreover, these platforms simplify the process of checking assignments by offering detailed analyses that highlight learners' strengths and weaknesses.

The active use of chatbots and virtual assistants is gaining significant popularity. For example, "Andy English Bot" offers English lecturers interactive lessons where students can practice conversational skills through chat, helping them improve their communication abilities [6]. Additionally, the virtual assistant "Replika" provides an opportunity to practice spoken English in an informal setting [6, 7]. These technologies allow learners to enhance their speaking skills in various contexts, not only within the educational process but also in their free time, without communicating with native speakers. Furthermore, the chatbot "ChatGPT" serves as a feedback tool for students learning foreign languages [8]. Alghannam analyzes the extent to which artificial intelligence can replace or complement traditional feedback methods provided by lecturers [9]. The main conclusions of his study are as follows:

1. ChatGPT provides structured but not always accurate feedback. In some cases, the recommendations were unfounded or excessive.
2. ChatGPT demonstrates higher efficiency in correcting grammatical and spelling errors.
3. There is a lack of sufficient emotional and communicative feedback, as the chatbot rarely praises students and does not behave like a real conversational partner.
4. Human supervision remains essential to prevent errors and enhance student motivation [9].

A system like "Speechling" uses speech recognition technologies to improve listening and pronunciation skills [5]. "Pimsleur" can also be classified as a speech recognition technology, as it employs an immersion method that focuses on conversational practice and speech recognition to enhance pronunciation [6], [10]. Using speech recognition technologies in foreign language learning helps students improve their listening and pronunciation skills. It creates a more effective and interactive language environment for learners.

In the digital era, many AI tools are available for English teachers, offering numerous opportunities to improve their work. These technologies enable the provision of instant feedback through chatbots, design interactive lessons that focus on developing key language skills such as speaking and listening, and assess assignments with greater precision by identifying students' strengths and weaknesses. They also enable the implementation of personalized learning tailored to the needs of individual learners and contribute to diversifying the educational process through the use of various digital platforms.

Methods and Materials

A quantitative study used a questionnaire among 52 English lecturers from Astana IT University and Karaganda Buketov University. The questionnaire was designed to examine the use of artificial intelligence technologies in English language teaching, their advantages and limitations, and lecturers' attitudes toward AI in the educational process. It consisted of three main sections: the types of AI tools used and areas where they are most effective, the perceived benefits and drawbacks of AI in language teaching, and attitudes, concerns, and training needs related to AI integration. The participants' responses will contribute to the research on AI integration in language teaching. The questionnaire was anonymous, and all data were used exclusively for research purposes.

Results and Discussion

The survey results (Fig. 1) reveal that AI chatbots are by far the most widely adopted tool in language teaching, with 45 respondents indicating their use. Their popularity can be linked to the immediacy of feedback and the ability to create interactive learning environments. Other frequently mentioned tools include grammar and style checkers (26) and personalized AI-based platforms (24), indicating a strong demand for accuracy and tailored instruction.

Meanwhile, interactive applications (19) and automated feedback systems (18) are valued for supporting both engagement and efficiency in the classroom. Less common are essay scoring programs (13), adaptive learning systems (9), and speech recognition technologies (6), while virtual assistants (3) and miscellaneous tools (2) are rarely used.

In general, the data suggest that teachers prioritize tools that are both practical and accessible, with chatbots leading the way, while other technologies find more limited yet specific applications.

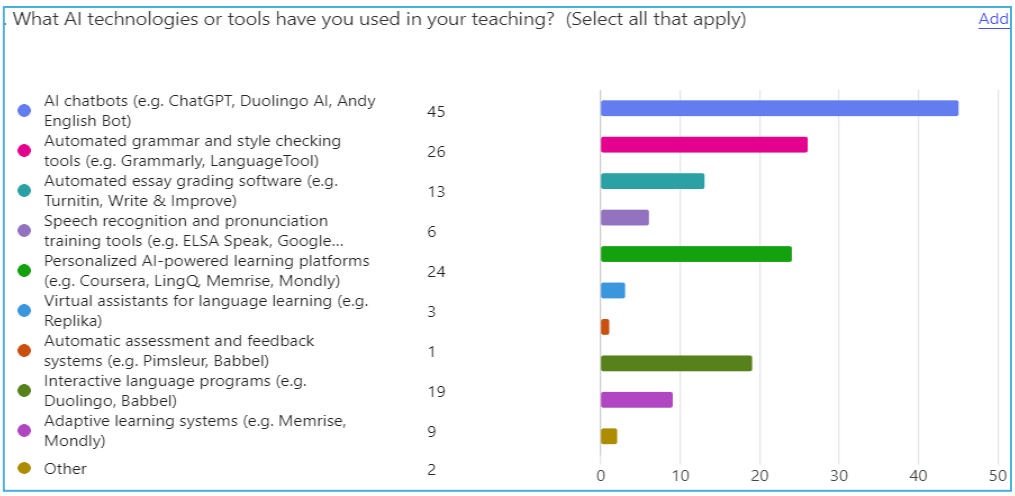

Figure 1. Data on the Use of AI Tools in English Language Teaching

In the following question (Fig. 2), respondents identified vocabulary enrichment as the most effective area of AI application in English teaching (32 responses). This shows that digital tools are especially valued for their ability to help learners expand and strengthen their vocabulary in engaging and adaptive ways.

Other areas with strong results included checking grammar and style (30), automating teachers' routine tasks (28), and creating interactive tasks and tests (27). These findings suggest that educators view AI not only as a means of enhancing language skills but also as a support mechanism that reduces workload and facilitates classroom management. Additionally, automatic generation of learning materials (22) and support

for distance learning and self-study (20) highlight AI's role in ensuring resource efficiency and flexible access to education.

Moderate levels of effectiveness were attributed to developing writing skills (20), automated assessment of written and oral work (18), personalized adaptive learning (18), and adapting the curriculum to individual needs (16). These results indicate areas where AI shows promise but may require further refinement to achieve wider acceptance.

By contrast, skills such as pronunciation improvement (14), listening practice (14), and learner autonomy development (14) received lower recognition, possibly reflecting limitations in current technologies for oral and independent learning. The "Other" category received no responses, suggesting that teachers mainly rely on established AI applications rather than unconventional tools.

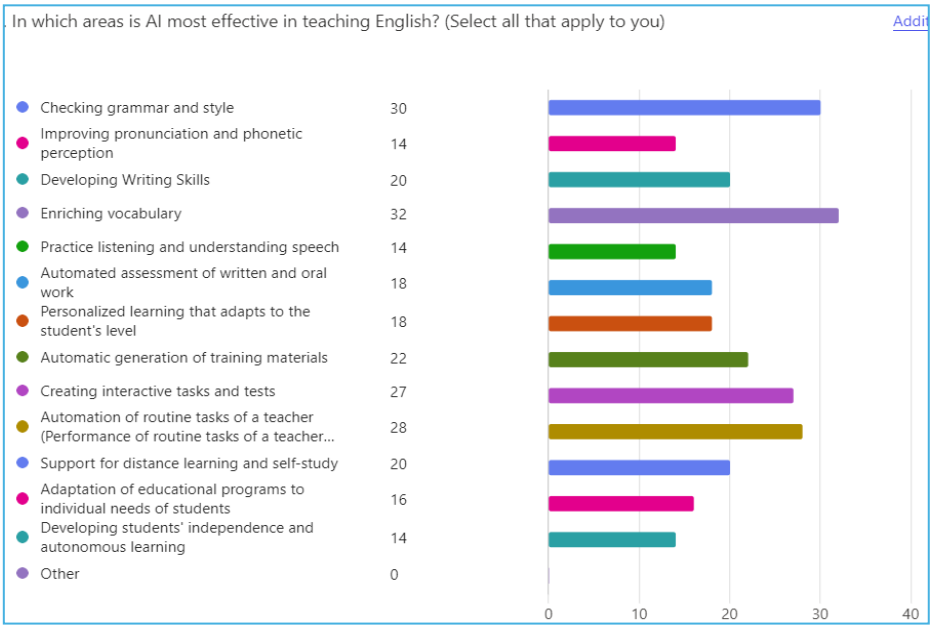

Figure 2. Effectiveness of AI Technologies in English Language Teaching

In the diagram presented below (Fig. 3), the largest share of responses (30 participants, 17 %) was associated with the effectiveness of instant feedback, highlighting the importance of timely responses that enable teachers and students to adjust the learning process in real-time. The second most frequent choice was the automation of teachers' routine tasks (27 responses, 14 %), which reflects the significant amount of repetitive work faced by lecturers and the potential of AI to reduce this burden, enabling them to focus on core instructional activities. The third most selected area was personalized learning adapted to students' individual needs (25 responses, 13 %), confirming the growing relevance of individualized, learner-centered approaches in English language teaching.

Improving educational standards through modern technologies was also reported to be a significant advantage (22 votes — 12 %) as well as enabling distance education through personalized study schedules (19 votes — 10 %) and increasing the relevance of education irrespective of location and time (19 votes — 10 %) depicting an importance of digital adaptability and the reconfiguration of educational pathways offered.

Less prominent aspects were the enhancement of student motivation (17 votes — 9 %), the shift from routine tasks to mentorship roles for teachers (17 votes — 9 %), and the improvement of educational programs through student-centered adaptation (12 votes — 6 %). No respondents selected the "Other" option, confirming the completeness and relevance of the proposed answer choices.

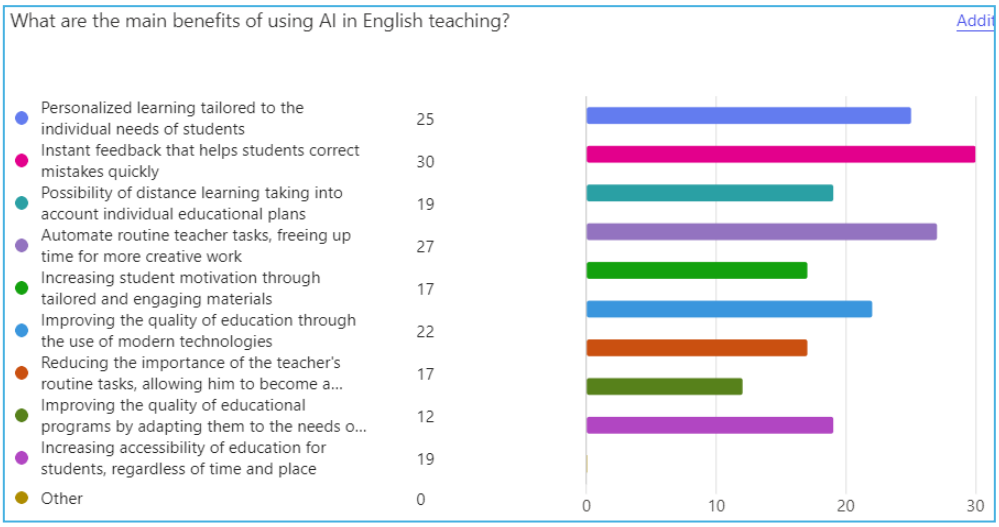

Figure 3. Data on the Advantages of Using AI in English Language Teaching

In the following question (Fig. 4), the most significant concern expressed by respondents was the risk of overdependence on technology (33 responses), which reflects teachers' fear that excessive reliance on AI may reduce human interaction and diminish the role of authentic communication in education. The second most frequently mentioned limitation was the limited ability of AI to address emotional and communicative aspects of communication (26 responses), pointing to the irreplaceable value of socio-emotional support in teaching. The third-ranked issue was the potential negative impact on students' critical and creative thinking skills (22 responses), emphasizing the need to balance automation with activities that nurture higher-order thinking.

Other concerns, though less frequently selected, still reveal essential aspects of teachers' skepticism toward AI. The lack of face-to-face communication and pedagogical guidance (20 responses) underscores that technology cannot fully substitute the supportive role of a teacher in guiding students. Similarly, issues with the accuracy and contextual appropriateness of AI outputs (15) raise doubts about the reliability of automated solutions in complex learning situations. The reduction of the teacher's role as a mentor (14) further reflects anxiety that overuse of AI may undermine the professional identity of educators.

Additional limitations, such as the loss of flexibility in adapting learning to specific contexts (12), underdeveloped methods of human-AI collaboration (11), and the financial burden of implementing and maintaining AI systems (11), indicate practical barriers that institutions must address before wider adoption can occur. The fact that only one respondent chose "Other" suggests that the survey was successful in identifying the primary concerns that the majority of teachers hold valuable.

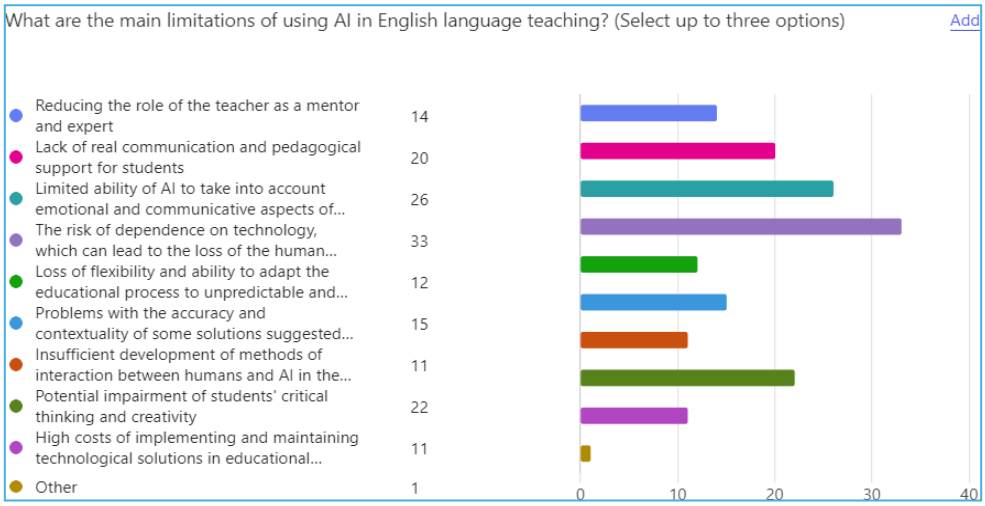

Figure 4. AI's Limitations in Teaching English

According to the graph below (Fig. 5), respondents had a generally positive attitude towards technology in education and favourable opinions about the use of AI in English language instruction. For example:

1. Almost every participant recognised AI's potential to aid in English language acquisition. A high degree of confidence in AI's capacity for learning is indicated by this high agreement.
2. There was also strong support for the idea that "AI should supplement, but not replace, traditional forms of instruction." The participants underlined that technology would serve as an additional learning tool rather than take the place of conventional instruction.
3. Most respondents agreed that "AI helps reduce the workload of English language teachers", showing appreciation for the automation of routine tasks and the more efficient organization of teaching time.
4. The statement "AI can personalize learning better than traditional methods" received generally positive feedback; however, it also drew more neutral and negative responses than the other items. This suggests a lack of complete trust in algorithm-driven personalization that does not involve teachers.
5. Responses to "I am comfortable integrating AI into my teaching practice" were predominantly positive. A considerable proportion of teachers either agreed or strongly agreed, indicating a growing level of confidence, digital readiness, and openness to pedagogical innovation.

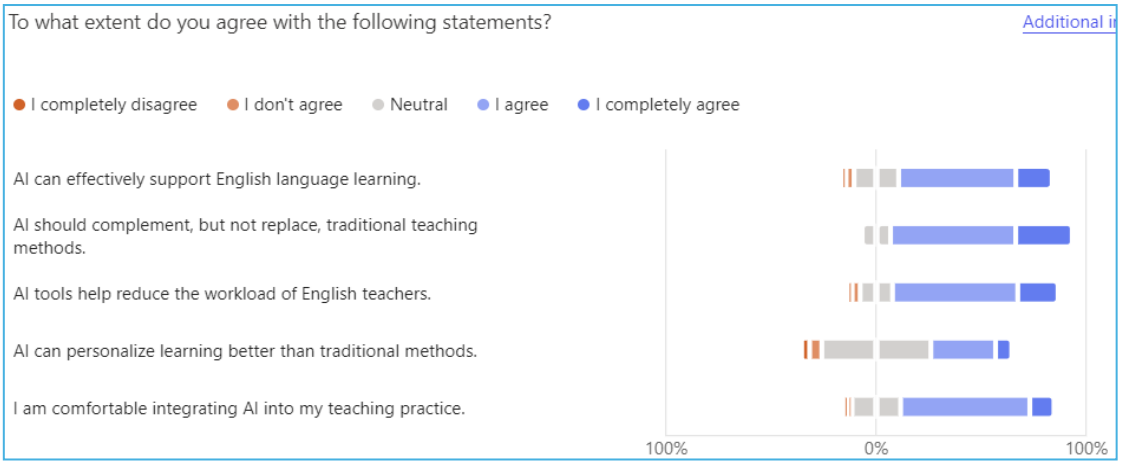

Figure 5. Statistics for Agreement with the Statements on the Application of AI in English Language Instruction

Three key risks were identified by respondents to the following question (Fig. 6) when implementing AI in English language learning. The first risk was a possible decline in students' critical thinking and creativity (29). It suggests fear that over-automation will demotivate independent problem-solving and reduce opportunities for intellectual development. Also pivotal was the overreliance on technology and the threat of system collapse (29), echoing concerns that technical unreliability, infrastructure flaws, or equipment failure would compromise continuity in learning. Personal contact and class interaction, which were lost (20), were also mentioned, highlighting the irreplaceable value of human communication in upholding motivation and fostering rich teacher-student relationships.

Other limitations, though less frequently mentioned, still illustrate essential challenges. These include the reduction of the teacher's role in the learning process (16), risks to student data privacy (15), and concerns about accuracy and contextual adequacy of AI-generated content (13). Respondents also noted the lack of sufficient training for teachers to work effectively with AI (11), the limited ability of AI to provide individualized pedagogical support (10), and practical barriers such as the high cost of implementation (7) and restricted access for students in resource-limited contexts (8). Finally, although only a small number of respondents (5) mentioned difficulties in integrating new technologies with existing approaches, this indicates that achieving full compatibility between AI tools and established educational practices remains a challenge.

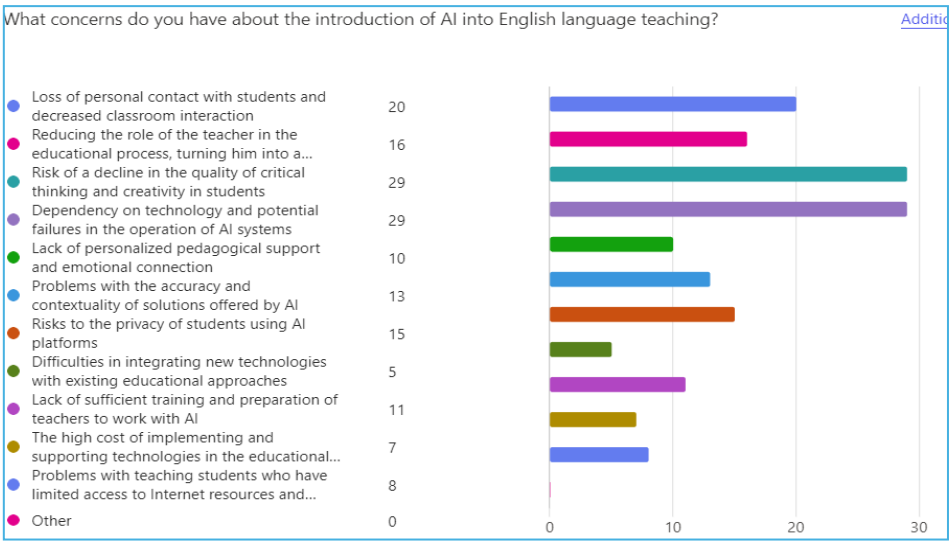

Figure 6. Information on Issues with AI Integration in English Language Instruction

The results in the last question (Fig. 7) make it abundantly evident that teachers place a high value on organised and hands-on professional development for incorporating AI into their work. Training and courses on using particular AI tools were the most popular option, receiving 19 % of responses. This highlights the need for practical, hands-on skills rather than broad theoretical knowledge. Close behind, courses on creating and adapting interactive assignments were selected by 15 % of respondents, showing interest in approaches that make lessons more dynamic and personalized. A further 12 % emphasized the importance of advanced training in instructional design and adapting technologies to the individual needs of students, highlighting the methodological dimension of AI use.

Moderate attention was also given to other forms of support. For example, ethics and data security in education were cited by 10 % of teachers. In contrast, practical training in installing AI in real classrooms and courses on the most recent advancements in AI each received 9 % of the votes. Roughly 8 % reported that methodological handbooks were a necessity, and the same percentage mentioned programs for mentorship or peer exchange as a predictor for the value placed on teamwork and adhering to ethics in professional training.

Fewer still were the references to technical support for AI software (6 %) and additional support for students (4 %). Interestingly, no one of the respondents selected the "Other" option, so the survey was successful in pinpointing the most significant areas where teachers need training and support.

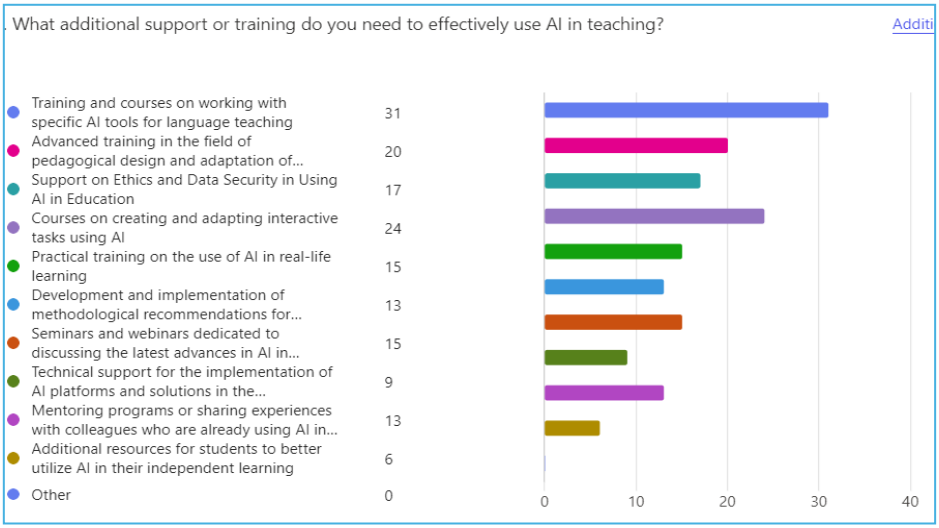

Figure 7. Areas of Additional Support Needed for Implementation of AI for English Language Learning

The findings of this study offer useful insights into how English lecturers are utilizing artificial intelligence technologies, what attitudes they have towards the benefits and limitations, and where they identify a need for further support. Findings substantiate that chatbots, grammar checkers, and learning platforms are the most used tools, valued mainly for being easy to use, accurate, and able to give instant feedback. These uses were primary and included vocabulary building, grammar aid, and routine tasks automation; altogether, these represent both language benefits as well as organizational benefits.

In parallel, lecturers pointed out issues of excessive dependence on technology, the limited ability of AI to overcome emotional and communicative dimensions of communication, and threats to students' critical and creative capabilities. Overall sentiments regarding AI are optimistic, although a note of caution continues to be expressed about algorithmic personalization outside human observation, which underscores the continued importance of the teacher's role in learning.

Conclusion

The objective of this study was to examine the way English lecturers utilize new AI technologies, their effects on teaching, and how their advantages and disadvantages are perceived.

The study reveals that English language teaching is highly embedded in AI, and most frequently used are chatbots, grammar correctors, and personalized learning platforms. These tools are particularly valued for immediate feedback, reducing the workload of teachers on a daily basis, and supporting more differentiated learning approaches. However, excessive dependency on technology, absence of real-time communication, and potential negative effects on students' critical thinking and creativity remain a concern. Although they emphasize moderation and ongoing pedagogical control, lecturers generally view AI as an effective adjunct to conventional practices. To guarantee the responsible and successful integration of AI, there is a significant need for professional development, especially in the form of hands-on training and methodological assistance.

The wider effects of AI use in education, particularly with regard to teacher well-being, should be further investigated in future studies. Policymakers and practitioners would benefit greatly from analysing the ways in which AI tools can lessen teacher burnout and promote sustainable professional practice.

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Т.М. Каримова, Н.А. Ишмухамбетов

Ағылшын тілін оқытудағы жасанды интеллект технологиялары: Astana IT University мен Е.А. Бөкетов атындағы Қарағанды университеті оқытушыларының көзқарасы

Ғылыми зерттеудің өзектілігі — білім беру үдерісінде жасанды интеллектің (ЖИ) рөлінің артуы және оны ағылшын тілін оқытуда қолдану мүмкіндіктерін жан-жақты талдау қажеттілігімен байланысты. Жасанды интеллектке негізделген қазіргі технологияларды, олардың артықшылықтары мен шектеулерін, сондай-ақ ағылшын тілі оқытушыларының бұл технологияларға деген көзқарасын зерттеу — ЖИ-дің тілдік білім беру саласына тиімді енгізілуінің болашағын анықтауға мүмкіндік береді. ЖИ технологияларының қарқынды дамуына және білім беру саласына белсенді енгізілуіне қарамастан, оларды ағылшын тілін оқытуда қолдану тәжірибесі әлі де жеткіліксіз зерттелген. Сондықтан бұл зерттеудің проблемасы — Қазақстан жоғары оқу орындарындағы, атап айтқанда Astana IT University мен Е.А. Бөкетов атындағы Қарағанды университетіндегі оқытушылардың жасанды интеллектке деген көзқарасын, қабылдауын және оның педагогикалық әлеуетін сипаттайтын эмпирикалық деректердің жетіспеушілігінде. Зерттеудің мақсаты — ағылшын тілі оқытушыларының қазіргі ЖИ технологияларын қолдану тәжірибесін және олардың білім беру үдерісіне әсерін, сонымен қатар педагогтардың бұл технологияларға деген қабылдауын зерттеу. Ғылыми әдіс ретінде ағылшын тілі оқытушыларының қатысуымен сауалнама түрінде сандық зерттеу жүргізілді. Алынған нәтижелер негізінде ЖИ технологияларын қолдану деңгейі, оқытушылардың бұл технологияларға көзқарасы мен оларды дамытудың мүмкін бағыттары туралы қорытындылар жасалды.

Кілт сөздер: жасанды интеллект, ағылшын тілін оқыту, оқытушылардың қабылдауы, жасанды интеллектің артықшылықтары мен шектеулері, ЖИ негізіндегі технологиялар, сандық зерттеу, жасанды интеллектің педагогикалық әлеуеті, жоғары оқу орындары арасындағы зерттеу.

Т.М. Каримова, Н.А. Ишмухамбетов

Технологии искусственного интеллекта в обучении английскому языку: взгляд преподавателей Astana IT University и Карагандинского университета имени Е.А. Букетова

Актуальность научного исследования обусловлена растущей ролью искусственного интеллекта (ИИ) в образовательном процессе и необходимостью тщательного анализа его возможностей в преподавании английского языка. Изучение существующих технологий на основе искусственного интеллекта, их преимуществ и ограничений, а также отношения преподавателей английского языка к использованию ИИ-технологий позволит определить перспективные направления их развития и оптимального внедрения в языковое образование. Несмотря на быстрое развитие технологий ИИ и их активное внедрение в сферу образования, практический опыт применения ИИ в преподавании английского языка остаётся недостаточно изученным. Поэтому проблема исследования заключается в нехватке эмпирических данных, отражающих восприятие и отношение преподавателей к таким технологиям, а также анализа их реального педагогического потенциала в условиях вузов Казахстана, а именно Astana IT University и Карагандинского университета имени Е.А. Букетова. Цель исследования предусматривает изучение использования современных ИИ-технологий преподавателями английского языка, а также их влияния на образовательный процесс и восприятия со стороны педагогов. В качестве научного метода было проведено количественное исследование в виде опросника с участием педагогов английского языка Astana IT University и Карагандинского университета имени Е.А. Букетова. На основе полученных результатов были сформулированы выводы о настоящем уровне использования и внедрения ИИ-технологий, их восприятии преподавателями и возможных направлениях дальнейшего развития.

Ключевые слова: искусственный интеллект, преподавание английского языка, восприятие преподавателей, преимущества и ограничения искусственного интеллекта, технологии на основе искусственного интеллекта, количественное исследование, педагогический потенциал искусственного интеллекта, межвузовское исследование.

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