

Non-Educational Use of Artificial Intelligence in English Language Education: Unity of Teaching and Learning Disruption

Alina SOKOLOVA ¹

¹ Tver State Medical University, Tver, Russian Federation; alinasokolova.tver@gmail.com; ORCID: <https://orcid.org/0000-0001-5981-2386>;

Abstract: *Artificial intelligence (AI) is being introduced into various aspects of our daily activities, including education. The study of foreign languages, as part of the educational system, is also influenced by new developing technologies. Researchers believe that artificial intelligence contributes to the displacement of traditional teaching methods and changes in the role of the teacher. This phenomenon is sure to be an achievement and progress. However, practical experience in teaching a foreign language at a nonlinguistic university shows the opposite: the use of artificial intelligence technologies by students does not speed up the process of teaching and learning a foreign language, but, on the contrary, complicates and slows it down. The aim of the study is to analyze the use of AI in linguistic education in a non-linguistic university, to identify the reasons for the lack of its effective educational impact, and to propose solutions. To achieve the stated goal, the work uses a comprehensive research methodology combining theoretical approaches, including analysis of literature on the topic of the study, generalization and classification, as well as empirical methods, implying the study of local pedagogical experience, questionnaires, and statistical analysis. The study demonstrates that non-educational use of AI breaks the unity of educational process composed of teaching and learning. Artificial intelligence in teaching foreign languages helps the teacher make the educational process highly differentiated and individualized. It is a valuable tool that makes the educational process more efficient and energy-saving. However, in learning foreign languages from the student's position, devoid of a motivating component, the artificial intelligence used non-educationally have no learning effect and does not allow students to fully assimilate and process the educational material. The author suggests ways to overcome this situation.*

Keywords: *artificial intelligence; language education; teaching languages; learning languages; text, workbook.*

How to cite: Sokolova, A. (2025). Non-educational use of artificial intelligence in english language education: unity of teaching and learning disruption. *Revista Românească pentru Educație Multidimensională*, 17(4), 458-480. <https://doi.org/10.18662/rrem/17.4/1064>

Introduction

In 2021, UNESCO presented the Rewired Global Declaration on Connectivity for Education, a new roadmap for the digital transformation of the educational process (UNESCO, 2021). The declaration discussed strategies for applying information technologies to provide universal quality education. However, the use of technology is not a goal in itself but a tool for fulfilling the knowledge needs of all the participants of the educational process.

Information technologies, particularly artificial intelligence (AI), have already transformed various aspects of our lives, including education. Foreign language teaching / learning, as part of the educational system, has also been affected by these trends. According to most contemporary researchers, traditional methods of linguistic education must give way to innovative approaches leveraging AI capabilities. Language teaching / learning has long relied on conventional techniques, now often perceived as boring and overly generalized. Indeed, a one-size-fits-all approach fails to account for individual learning paces, learner's strengths, weaknesses, and preferences, leading to slower progress and reduced educational effectiveness.

The development of AI has profoundly impacted global language education standards. Most theoretical researchers and practitioners believe AI is displacing traditional teaching methods and reshaping the teacher's role. AI technologies are undoubtedly an achievement and a step forward. However, practical experience in teaching foreign languages within non-linguistic state education systems suggests the opposite. At this stage of methodological development, use of AI by students doesn't only fail to accelerate learning process but, on the contrary, complicates and slows it down. Improper use of AI prevents students from fully mastering and practicing the material.

The aim of this study is to analyze the application of AI technologies in foreign language teaching at Russian non-linguistic universities. To achieve this, we examine the possibilities of AI in the methodological framework of linguistic education in non-linguistic institutions, assess the effectiveness of AI in practice through, and propose ways to enhance learning outcomes. The study employs a comprehensive methodology combining theoretical approaches (literature analysis, generalization, and classification) and empirical methods (local pedagogical experience, surveys and interviewing, statistical analysis).

The significance of the results lies in their implications in foreign language teaching practice. The approaches proposed by the author can be used in the practical work of teachers and will enable the transformation of AI into a full-fledged educational and effective teaching tool. The study also contributes to broader discussions about the ways to overcome non-educational use of AI which disrupts teaching and learning unity as the key to success in mastering foreign languages. The research demonstrates the necessity for foreign language teachers to take certain actions aimed at using the advantages of AI for the benefit of not only the teaching process, but also the learning of foreign languages.

Literature review

The use of AI in education is widely discussed in contemporary methodological literature. One prominent Russian research group promoting AI in education is led by Professor P.V. Sysoev at Tambov State University (Russia). Their work explores AI's potential in teaching, language acquisition, and pedagogical management, emphasizing the didactic value of neural networks for intensifying language teaching / learning (Sysoev, 2024). Sysoev and colleagues in the lack of systematic and comprehensive AI-based language learning conduct large-scale theoretical and empirical research to improve education in the AI era (Sysoev et al., 2024). Under Sysoev's guidance, a matrix of AI tools for linguistic education was developed, AI pedagogical and didactic potential was analyzed (Sysoev et al., 2024), key educational properties and methodological functions were identified. M.N. Evstigneev defines didactic and methodological principles for language teaching with AI integration (Evstigneev, 2024) and introduces the concept of digital didactics – a distinct pedagogical field addressing education in an increasingly digitalized society.

Most linguists and educators agree that AI has transformed language learning by offering personalized, optimized tools (Rusmiyanto et al., 2023). AI enables adaptive, inclusive, and engaging education (Luckin et al., 2016), making learning more dynamic and assistive (Schmidt & Strasser, 2018). Other benefits of AI in language teaching include the possibility of: personalized and adaptive learning (Titova, 2024; Tolstyh, 2023), real-time feedback and assessment (Sysoev et al., 2024), gamification and immersive experiences (Celik et al., 2022), overcoming psychological barriers (Chen et al., 2020), access to diverse resources (Berendt et al., 2020; Karatas et al., 2024), 24/7 availability and sense of community (Strasser, 2021). Indeed, AI has a great potential to enhance the modern methodology of teaching foreign languages which is based on the PCO (problem- and communication-oriented) approach

divided into two constructive components: problem and practice. The first component requires that the process of learning a foreign language be filled with problem-based tasks that 1) promote the use of language as a means of communication, 2) focus on the content and meaning of information transmitted in the process of communication, 3) ensure a high degree of authenticity, 4) lead to a clearly realized language product or result. Practice, understood as the repetitive, purposeful and targeted use of language-related activities that are functional, contextualized and productive, plays a decisive role in teaching foreign languages. Practice in learning a foreign language should focus on the learner's needs to communicate (fluently and freely) in the target language, be authentic in terms of language and content; develop the learner's autonomy; provide feedback; be individualized and differentiated; adapt to the affective and cognitive needs of the learner (Heymann, 2005). All of the above features of the modern methodological PCO approach can indeed be most effectively implemented using AI technologies. Like any approach, this methodology should be implemented in the educational system, as a special type of pedagogical activity that is directed by the teacher. And the role of artificial intelligence should be reduced to a means of achieving learning goals - mastering the necessary competencies. Consequently, the teacher, as the head of the educational system, can use AI resources to create an effective problem-based and practice-oriented environment. The purpose of using AI is to individualize educational processes whenever possible to provide adaptive support to learners in developing their language skills within the framework of tasks aimed at acquiring the necessary language competencies. It should be noted that the above mentioned advantages and benefits of AI technologies refer only to language learning which is a motivated and purposeful process of mastering new competencies. In the absence of a goal and motivation, the use of AI becomes a barrier to the acquisition of new knowledge and skills. Indeed, the critical examination of AI's limitations and risks in education nowadays is a crucial and growing field of scientific literature. UNESCO itself in sections on ethics and challenges of "AI and Education: Guidance for Policy-makers" (UNESCO, 2023) provides a structured analysis of risks. It highlights key limitations among which the lack of proven learning outcomes is stated. N. Selwyn argues that the push for AI in education is often driven by corporate and technological interests rather than sound pedagogical principles. He warns against the reduction of education to a set of measurable data points (Selwyn, 2019). A primary concern is the threat to the pedagogical process itself. AI can help solve to tasks that can be automated, but cannot be yet considered as a solution for more complex tasks of higher learning (Popenici & Kerr, 2017). Critics argue

that AI-driven models, particularly those promoting “personalized learning”, tend to reduce education to a linear, competency-based transaction, a trend with a long history that often neglects the social and collaborative aspects of learning essential for deep understanding (Watters, 2021). Furthermore, the rise of generative AI poses a direct challenge to student development by undermining the ability to construct a line of reasoning, being the essence of critical thinking. The focus shifts from the process of learning and thinking to the production of a correct-looking output, making learning a transactional rather than a transformational experience. Of course, all limitations and risks of AI technologies come out when they are used purposely or unconsciously non-educationally.

Fundamentally, non-educational use of AI can short-circuit the metacognitive processes essential for language acquisition. Metacognition, defined as “one’s knowledge concerning one’s own cognitive processes and products or anything related to them” (Flavell, 1976), is the learner’s ability to monitor their understanding and identify knowledge gaps. When a student substitutes an AI-generated translation for the arduous process of deciphering a text, they bypass the crucial struggle that solidifies learning. As John Hattie asserts, “The core of metacognition is when students become aware of how they learn, and can set goals for themselves and self-monitor their progress” (Hattie, 2012). The AI provides a product, not a process, thereby starving the metacognitive engine of the feedback it requires to develop. This directly corrodes self-regulated learning (SRL), the cyclical process wherein students plan, monitor, and reflect on their progress. Barry J. Zimmerman, a leading SRL theorist, describes it as “the self-directive process through which learners transform their mental abilities into academic skills” (Zimmerman, 2002). A self-regulated learner plans a writing task, attempts a draft, and identifies errors. Non-educational AI collapses this cycle; the planning and monitoring are outsourced, and reflection becomes superficial. The learner becomes a curator of AI-generated content rather than an active constructor of knowledge, leading to what Robert Bjork terms “illusory competence” where the “ability to procure a correct answer masks a fundamental lack of understanding” (Bjork, 1994). The most immediate concern, however, revolves around academic dishonesty. The line between using an AI as a “tool” and a “substitute” is notoriously blurry. The core of the issue lies in the misrepresentation of the work’s origin. As posited by the International Center for Academic Integrity, integrity is grounded in “the commitment to five fundamental values: honesty, trust, fairness, respect, and responsibility” (ICAI, 2021). Non-educational AI use challenges these principles when the learner’s contribution is limited to

prompting, and the AI's generative output is presented as their own. This constitutes a fundamental breach of authenticity, what Phil Race calls “passing off someone else's work as your own” (Race, 2001), thereby undermining the purpose of assessment.

The non-educational use of AI in language learning presents a profound pedagogical challenge. It risks creating a generation of learners with strong AI-prompting skills but weak metacognitive and self-regulatory capacities. The educational imperative is not merely to police this usage, but to design new pedagogical models that integrate these powerful tools in a way that fosters, rather than bypasses, the cognitive struggles essential for genuine learning.

The proposed study attempts to analyze the specifics of using AI technologies in language education. To achieve the goal, the following practical tasks were consistently solved during the study: interviewing foreign language learners, studying the pedagogical experience of a particular Russian educational institution, and providing statistical analysis of the effectiveness of the proposed solutions. As the paper is deeply rooted in the specifics of the Russian state education system this study is subject to several important limitations that must be considered when interpreting its findings. The primary constraint stems from its design as a single-institution investigation. The results are inherently shaped by the unique structural, administrative, and resource-based characteristics of the specific setting in which the research was conducted. However the results were publicly partially announced and non-officially discussed with the teachers of different Russian universities and almost all proved the presence of such a problem like non-educational use of AI. Of course the findings should therefore be viewed as preliminary and context-specific, highlighting the need for future replication across a broader range of sites to establish their wider applicability. Furthermore, the research was conducted within a specific cultural context, which presents a significant limitation regarding the cross-cultural validity of the results. The participants (students) are drawn from a single pool, which is rather homogenous in terms of socioeconomic status (the University is situated not in the capital of Russia), education level, and professional specifics (medical sphere). This limits the variability within the data and makes it difficult to know if the results would hold for a more diverse group. Local socio-cultural norms, values, and behavioral patterns undoubtedly influence the manifestation of the phenomena under investigation. The findings are best understood as reflective of the dynamics, and further cross-cultural comparative research is essential.

Methodology

To achieve the objectives of the study, the pedagogical experience of teaching a foreign language in a Russian non-linguistic (medical) university was analyzed, AI technologies used in language education were described, their educational potential was identified, and possible methods of non-educational use were determined.

The paper represents a combination of two methodological approaches – a qualitative case study and an action research project. The first part of the paper generates a rich, in-depth account of a specific phenomenon within its real-life context. The process of this part of the research was linear, moving from design to data collection, analysis, and reporting. The outcome presents a deeper comprehension of the situation. In contrast, an action research project described in the second part of the paper is primarily an inquiry driven by a desire for action and improvement. Its main goal was to solve an immediate, practical problem within a specific educational organization. The research process of this part was inherently cyclical and iterative, following a spiral of planning an action, implementing it, observing the effects, and reflecting on the results to inform the next cycle. The outcome is tangible change and empowerment within the local context. The benefits of this combination are significant. It adds a layer of methodological rigor and depth to the action research, ensuring that the process of change is thoroughly analyzed, not just the final result. Furthermore, while the action research aims for local improvement, the case study framework packages the experience into a detailed account that other practitioners can learn from, enhancing its transferability. Ultimately, this union yields dual outcomes: the tangible improvements sought by the action research and a deep, conceptual understanding of the change process derived from the case study analysis.

To study the features of using AI technologies in language education, a random sampling survey was conducted, in which 200 students of the 1st and 2nd years of the medical university studying the discipline “Foreign Language” took part. Data was collected in electronic format using an anonymous questionnaire with subsequent information processing. The students were asked 11 questions in their native language (Russian) divided into 3 parts (demographic information, AI technology and its value awareness, motivation). The questionnaire translated into English and research protocol are provided in the Appendix. Quantitative and qualitative analysis of the obtained data was accompanied by a comparison with objective indicators – academic performance. The questionnaire included closed, open and scale questions about the use of AI tools, assessment of

their accuracy, as well as motivation to learn a foreign language. The survey was conducted among students who used traditional teaching and methodological tools that involve working with an authentic text, which is the main didactic unit of the classical model of teaching foreign languages.

Low academic performance sponsored by non-educational use of AI technologies by students forced the teachers to revise the teaching materials in order to exclude the possibility of students to use AI to solve educational problems. The teachers developed workbooks for foreign language students.

A randomized controlled trial was conducted to evaluate the effectiveness of structured workbooks in reducing academic failure rates. The study initially randomized 521 students into two groups. The experimental group consisted of 369 students who received the workbook intervention, while the control group contained 152 students who continued with standard instruction with the same content without workbooks. The workbook was implemented throughout one academic semester, spanning 16 weeks of instruction. The workbook contained comprehensive coverage of lexical and grammatical content specifically designed to address common learning gaps. It included thematic vocabulary lists with contextual examples, grammar rules with practical application exercises, progressive difficulty tasks, self-assessment sections with answer keys, and error correction and analysis activities.

Academic failure was operationally defined as receiving a grade of “2” (poor mark) on a standardized achievement test grading 2 (poor), 3 (satisfactory), 4 (good) and 5 (excellent) marks. This test was specifically aligned with the curriculum content and measured vocabulary acquisition and application, grammatical accuracy in written production, comprehension of syntactic structures, and lexical appropriateness in contextual usage. The assessment demonstrated high content validity as it directly measured the linguistic elements covered in the curriculum.

Baseline testing occurred in 2023 when both groups completed the standardized test before intervention implementation. Post-intervention testing followed in 2024 when both groups completed the standardized test after the 16-week intervention period. Descriptive statistics methods were used to calculate the proportions (%) of students who failed to pass the test in English in each group and year and to compare changes in the experimental and control groups (absolute and relative decrease); methods for testing the statistical significance of changes, including the Z-test for two proportions and the Difference-in-Differences (DiD) method were also applied (Novikov, 2004). The statistical analysis revealed significant improvements in academic outcomes. Comparison of proportions using Z-

test demonstrated that in the experimental group, the rate of unsatisfactory marks decreased substantially from 13.3% to 7.0% ($Z = 3.45$, $p < 0.001$), while no significant changes were observed in the control group ($p > 0.05$). The Difference-in-Differences (DiD) analysis, which controlled for external factors by comparing changes across both groups, showed a net effect of 7.2% attributable to the workbook intervention.

Results and discussion

In recent years, information technologies have become increasingly integrated into education. Key conceptual areas of AI application in language education include Natural Language Processing (NLP) (Banerjee, 2020; Meurers, 2020) and Machine Learning ML (Alpaydin, 2014). Currently, artificial intelligence technologies integrated into the context of language education are implemented by such tools as machine translation, word processing and text generation, chatbots, virtual tutors. Our own pedagogical experience and observation suggests the following ways of their application in linguistic education.

1. There are several obvious possibilities for using machine translation tools in language learning. Machine translation systems allow for quickly grasping the general information from the text, and some cases it's enough for the learning process. Some machine translation tools have built-in dictionaries and thesauruses, so learners can highlight a word to select the most appropriate translation option. It can help enlarge the vocabulary. But in many instances, the learner's own language knowledge remains essential as machine translation systems often lack the linguistic intuition to recognize the nuanced meaning of a word in context or to ensure textual coherence. This is particularly evident in technical and medical fields, where accurate translation requires a deep understanding of highly specialized terminology. Thus, while machine translation is a convenient tool, it is not advisable to rely on it completely for language learning.

2. Text generators and processing tools have evolved from the built-in spell checkers of word processing programs. Modern AI-powered writing tools offer functionality that includes not only error correction but also a deep analysis of a text's coherence and clarity. Operating on vast datasets and complex algorithms, these programs generate adaptations and recommendations based on a multitude of parameters: the target audience, level of formality, subject area, tone, and the author's communicative intent. These tools demonstrating to the learner that language is a context-dependent system, contributes to the development of writing skills. They provide not just an assessment of the text, but also educational explanations,

acting as comprehensive solutions for expanding vocabulary and improving grammar. It is important to note that, much like machine translation systems, these tools cannot achieve full accuracy, as the appropriateness of a text is always determined by its pragmatic context.

Another type of such tool is text generators. An AI text generator is a type of software that uses artificial intelligence to generate written text. AI text generators can be used to complete creative language assignments, but to get a competent, correct result and an effect on the development of language skills, students need to perform a number of actions, such as, for example, making a text plan and a draft of each section, carefully checking the text, correcting inaccuracies and creating transitions between sections. It is worth noting that AI text generators cannot generate creative or original content, therefore, the resulting text may be plagiarism. Another limitation of such programs is their lack of understanding of context, which means that they can create a text that is incorrect or inappropriate in certain situations. In addition, they are not able to understand the emotions or intentions of the linguistic personality. As a result, the text may not be convincing, and may not correspond to the tone or intentions of the author.

3. Chatbots/virtual chat agents are computer programs that simulate human conversation using natural language processing. In language learning, chatbots engage learners in conversational practice by allowing them to interact in the target language (Titova & Timuryan, 2024). The functionality of modern language chatbots includes conducting dialogues, providing immediate feedback, answering questions, and organizing language exercises in an audio-visual format. These systems enable the practice of speaking and listening skills within an interactive environment, simulating human discursive behavior. An important feature is their ability not only to generate personalized responses but also to evaluate user performance, formulating recommendations for skill improvement to achieve learning goals (Healey, 2020). Chatbots are of particular value to learners at the beginning level of language proficiency. This is because the lexical and grammatical material at the A1-A2 levels is characterized by structural predictability and minimal semantic complexity. These systems are distinguished by their accessibility and cross-platform compatibility, and their interfaces are designed with a user-centric approach. The integration of multimedia technologies ensures the comprehensive development of language skills. Furthermore, the anonymous format of interaction helps minimize communication barriers for anxious learners, as it eliminates the factor of social evaluation and the need to demonstrate paralinguistic features.

4. Virtual language tutors constitute advanced artificial intelligence systems that function as personalized instructors. Utilizing machine learning and artificial intelligence methodologies, they perform analysis of learners' knowledge, identify their strengths and weaknesses, and develop individualized learning pathways. These systems provide adaptive educational materials, dynamically adjusting the complexity of the content based on individual progress. Virtual tutors integrate diverse pedagogical methodologies, including interactive exercises, multimedia resources, and simulations of real-life communicative situations. This integration ensures a comprehensive educational experience and provides personalized support throughout the learning process.

However, within the walls of institutional language education, all these latest technological achievements are not being utilized properly. AI technologies such as chatbots and virtual tutors cannot be used within Russian public education system due to the nature of the educational sphere, which is built on mandatory face-to-face interaction between a teacher and a student. Other technologies, when used wisely, can help students to facilitate and speed up the process of studying the educational material (completing assignments), but will have virtually no positive effect on the development of communicative language skills. Most often, both machine translation and text generation tools are used by students intentionally incorrectly in the educational process only to achieve the goals of quickly completing exercises and passing tests. Machine translation is often used by students to translate not only texts that are intended for skimming and scanning, but also for basic lesson texts that involve comprehensive detailed reading and mastering active vocabulary. The text comprehension tasks themselves are also subject to machine translation, which allows students to complete the exercises without any effort associated with foreign language skills development. Thus, any work with text loses its educational meaning. Text generators are used by students when completing exercises aimed at developing the skills of composing texts for written or oral presentation. Such programs allow students to easily generate essays or abstracts on a given topic. This type of non-educational use of AI is proved by the results of the interview of students of a Russian non-linguistic university.

The questionnaire for students on the use of AI in foreign language studies was a combination of screening, multiple-choice, and Likert-scale questions. The questions were designed to quantify awareness, frequency of use, and attitudes. The first part was devoted to the demographic information to state exactly what year of study the students were. The second part highlighted their awareness of AI technologies. It started with the question whether they are familiar with the term "Artificial Intelligence

(AI)” in the context of educational technologies. Absolutely all respondents got some ideas about it. The second question gave the opportunity to choose AI-powered tools the students are aware of such as machine translation services (e.g., Google Translate, DeepL, Yandex Translate), AI text generators (e.g., ChatGPT, DeepSeek), virtual/AI tutors for language learning (e.g., Duolingo Max, chatbots). 87% of the respondents are aware of the capabilities of machine translation, and 63% - of the potential of AI text generators. Less than 0.5% of respondents use virtual tutors when studying a foreign language on their own. Next part of the questions covered frequency and purpose of AI use. The students were supposed to choose on the scale: never, rarely, sometimes, often, always) to demonstrate how often they use the AI technologies (Machine Translation (e.g., Google Translate), AI Text Generators (e.g., ChatGPT) for the "foreign language" studies. The data showed that over 90% of respondents selected "Often" or "Sometimes". The fourth question mentioned the primary reason for using machine translation or AI text generators for "Foreign Language" course. The students were to select the most common variant for their experience from the following variants:

- To complete homework assignments (e.g., translations, essays, exercises)
- To check my own work for grammar and spelling mistakes
- To understand a difficult text by getting a rough translation
- To learn new vocabulary and phrases
- I do not use them at all.

Combining the responses from this question with the frequency data from the previous question allowed us to state that more than 85% of students use available automatic translation programs or free AI systems that simultaneously implement machine translation and text generator technologies to complete homework and assignments in the discipline “Foreign Language”.

Next section of the questionnaire assessed perception of accuracy and educational value of AI tools. The students were asked to what extent they agree with the following statement: “I am confident that the translations and texts generated by AI programs are accurate and free of factual errors”. The scale was “strongly disagree, disagree, neutral, agree, strongly agree”. The percentage of respondents who selected “Agree” or “Strongly Agree” was calculated and gave the result that more than 70% of respondents are completely confident in the accuracy and correctness of the results offered by the programs and the absence of factual errors in the tasks completed.

The same scale was used to find the information about their (dis)agreement with the statement that using AI tools to complete assignments directly has little to no educational value for learning a foreign language. The high percentage (98%) who are aware of the lack of educational impact came from those who selected “Agree” or “Strongly Agree”. This shows they use the tools despite knowing this. Next question helped evaluate critical engagement with AI output. Being asked what was their typical process when they use an AI tool to help with a “Foreign Language” assignment, students could choose one variant from the list:

- I use the AI's output exactly as it is generated and submit it.
- I make minor changes or corrections before submitting the work.
- I use the AI output as a draft or source of ideas, but I significantly rewrite, analyze, and process it to make it my own before submitting.
- I do not use AI tools for assignments.

This question directly identified the 6% who critically evaluate the results offered by the programs, analyze and process them before presenting them to the teacher. The first two options would cover the majority who do not engage critically.

Thus, the use of AI technologies hinders language learning by encouraging passive learning and not developing critical thinking and analytical skills. AI gives the student false confidence in language proficiency, hides actual gaps, which leads to further difficulties during oral examinations.

Analysis of academic performance has shown a significant decrease in the level of foreign language knowledge over the past 3 years. The non-educational use of AI is sponsored naturally by a lack of motivation to learn a foreign language. This fact was obvious from the survey results as the second part of the questionnaire for students was composed of the questions to measure student motivation and future intentions regarding foreign language learning.

The first question was to measuring current attendance and motivation. The students were to select only one option to answer which of the following best describes their current attendance in foreign language classes. This question found only 11% who are currently attending classes to learn/improve a language. Other variants were: I attend a foreign language class only because it is a mandatory part of my curriculum (88,5 %) and I do not currently attend any foreign language classes (0,5 %).

The second question highlighted to what extent students agree that proficiency in a foreign language is necessary for developing their

professional skills. There 5-point Likert Scale with answers from “1- Strongly Disagree” up to “5 - Strongly Agree” was used. This question captured only 14% of students who are confident in the professional necessity of language skills.

Next question revealed the disconnect between believing something is necessary and acting on it now. The respondents were asked when they plan to focus on improving foreign language skills for professional development. The key finding was that the 14% who were confident in the need of foreign language predominantly selected option “I plan to do it after I graduate...”. This created the contrast: they see the value but are postponing the action.

The results obtained are likely due to the current geopolitical situation in Russia where the general need for European languages knowledge is decreasing giving way to Eastern language studies. The second unmotivating factor is the specifics of non-linguistic (medical) education which lowers the status of foreign language study for a medical professional in Russia as it is not obligatory. Another fact is a heavy workload by specialized subjects when the students have no time at all for other extra curriculum activity and their only wish is to save efforts at the cost of foreign language studies, for example, to improve their skills in more specialized courses.

Low motivation, which leads to non-educational use of AI technologies by students, makes the process of mastering foreign language communicative competence, which is formulated in the curriculum as “the ability to use a foreign language for academic and professional interaction” a mere formality necessary for obtaining a specialist diploma. However, the very formulation of the competence allows for the use of AI technologies – they can very well help in communicative interaction. In this situation, the status of a teacher who is forced to teach a foreign language to students who perform all educational activities using AI technologies remains unclear as well as the integral unity of teaching and learning seems to be disrupted.

In order to determine the possibilities of using AI in the educational process, it is necessary to understand the essence of AI and the features of educational activities.

As it is known, ideally, the educational process is an inseparable unity of teaching and learning, the main differences of which are analyzed and summarized by the author in Table 1.

Table 1. Teaching and learning: comparative characteristics.

Points of comparison	TEACHING	LEARNING
Definition	purposeful activity with various approaches and types to help learners acquire the skills, knowledge, and abilities needed to perform a specific function.	the process by which new knowledge, skills, behavior, or values are acquired, new conceptual areas are mastered, and ways of thinking are changed.
Focus	teaching methods, planning, development of teaching strategy and provision of material principles of assimilation and mastering of information	principles of assimilation and mastering of the information
Control	educational material, information, pace and structure of the learning process,	engagement, interpretation and application of the information
Interaction	often one-sided, external (teacher - student)	internal (within the student)
Responsibility	methodically competent provision of clear, accurate and engaging educational material	ensuring continuous attention, understanding and correct application of the information provided

To answer the question about the possibility of using AI technologies in linguistic education, it is necessary to define exactly what they are. According to most commonly accepted interpretations, artificial intelligence is understood as a set of technologies designed for the autonomous solving of problems and execution of tasks aimed at achieving specified goals in the absence of explicit human control and direction. It is worth noting that the main feature of AI technologies is the ABSENCE of the human factor. Therefore, we can talk about the use of artificial intelligence only from the point of view of learning a foreign language, but not of teaching, which cannot take place without a teacher. Of course teaching can be led not by a person, but by a machine with AI. However, in the realities of Russian modern institutional education, this is not acceptable. Within the framework of an educational institution, AI technologies are not able to replace a teacher, but they are a valuable tool in their hands, allowing them to make the educational process more efficient and energy-saving for the teachers themselves. In this aspect, we can talk about a number of areas

of AI application, for example, for organizing the educational process (e.g. for a comprehensive assessment of language skills (Haddad, 2021; Kim et al., 2019) or for generating the educational materials of the stated content (Sysoev et al., 2024). AI tools, for example, can be used to voice texts, prepare exercises from a given vocabulary according to a given grammar, create pictures according to given criteria, and even generate educational texts themselves with selected vocabulary and grammar and tasks for them. The educational impact of AI in this aspect of linguistic education is beyond doubt.

This is also typical for learning a foreign language. AI does offer quite a wide range of opportunities for foreign language learners. Being motivated by the desire to get the necessary competencies the learners use all AI tools with definitely stated educational purposes. However nowadays foreign language learning in a non-linguistic institution, as the study showed, demonstrates non-educational use of AI technologies by poorly motivated learners. In this case, AI technologies become a ‘friend’ of learners, helping to quickly complete the necessary tasks and requirements and learners’ ‘enemy’, preventing the necessary competencies from being properly formed. So AI is deprived of its educational impact separating sharply learning and teaching which are deeply intertwined.

In this regard, teachers face a huge and still unsolved task - to restore the unity of teaching and learning introducing all the advantages of AI into the process of teaching foreign languages, without breaking and abandoning traditional teaching methods. AI is designed to complement and diversify classical approaches, and not replace them. The teacher must understand the possibilities of using AI technologies, demonstrate to students the shortcomings of AI technologies in the implementation of professional communication in a foreign language, develop motivation to study a foreign language in order to minimize the non-educational impact of AI. Teachers have yet to solve this problem, but it is already possible to outline the main directions leading to an effective resolution of the problematic situation. The most important thing that a teacher needs to do in modern linguistic education is to rethink and transform the methodological techniques of teaching foreign languages.

This problem can be solved in two ways:

1. To increase motivation for learning foreign languages and teach students to use AI language tools competently and effectively.
2. To modify the methodological techniques of foreign language teaching. AI technologies used in language education affect the most central aspect of the linguistic learning model which is the text. Both ways of

students' interaction with the text – reproduction (reading and understanding) and generation – are currently under the influence of AI. Consequently, traditional types of work with text are becoming ineffective. They need to be changed.

And if the first option requires long-term development associated with changing the principles of linguistic education in a non-linguistic university, the second option has been successfully implemented in practice. The teachers of Tver State Medical University developed a workbook for foreign language students. Traditionally, a workbook is considered a type of printed textbook that contains tasks for self-instructed work of students. However, the developed workbooks had an expanded format and functionality that allowed minimizing the use of AI. The workbooks transformed the methods of working with text as a key aspect of linguistic cognition. Work with the main text of each lesson, containing the vocabulary required for mastering, is carried out only under the guidance of a teacher in the classroom. At the same time, the text is provided with a Notes field intended for students to work with. It must be filled in accordance with the level of training. For example, they can write down words that require translation or explanation (active vocabulary of the lesson), clarify the pronunciation of some lexemes, provide information about a term's meaning or its grammatical characteristics. Another significant advantage of the workbook is the combined acquisition of lexical and grammatical material implemented by tasks and the absence of division of exercises by language skills (speaking, reading, writing). The workbooks are developed within the framework of a problem-based, practice-oriented personal approach. The basis of this approach is practical communication (interaction), focus on the personality of the student and real communication situations. As a practical experiment showed, the workbooks almost completely eliminated the non-educational use of AI and increased motivation for the educational process. This contributed to an increase in the effectiveness of linguistic education. The results of the analysis showed that the introduction of workbooks led to a reliable decrease in the proportion of unsatisfactory marks, which confirms the positive impact of the proposed approach. It made possible to exclude non-educational interaction with AI technologies for performing educational tasks.

The pedagogical experiment involving the usage of the workbook represents a significant and thoughtful response to the challenges posed by generative AI. Rather than viewing the workbook strategy as a final solution, it is more productively analyzed as a crucial transitional step. The workbook strategy is not merely a logistical tool to block AI; it is a deliberate

intervention in the cognitive and regulatory processes of the learner, designed to prevent the pathway to dishonesty by strengthening essential academic skills. The workbook's design directly targets the metacognitive failures that enable non-educational use of AI. The methodology suggested forces a continuous cycle of metacognitive monitoring. Students must constantly assess their own understanding (Do I know this term?), plan their learning (What must I write down to remember this?), and evaluate their strategies (Is my translation accurate?). This structured practice builds the very metacognitive awareness that is bypassed when a student passively copy-pastes a text into an AI translator. A student who has not engaged in this self-questioning lacks the awareness to even know what to ask an AI, leading to its use as a crutch rather than a tool. The workbook, therefore, acts as a scaffold for metacognitive skill development, creating a robust internal monitor before any external technological aid is introduced. This process is intrinsically linked to fortifying the cycle of self-regulated learning (SRL). The workbook formalizes and supports the forethought and performance control phases. This structured environment minimizes the opportunity for the self-regulatory breakdown that often manifests as task-avoidance and subsequent rushed, unauthorized AI use. The student is guided through the productive struggle of language acquisition, closing the performance gap that makes academic dishonesty an attractive last resort. In essence, the workbook provides the external regulatory framework that students internalize, building SRL capacity. Consequently, the strategy severs the causal link between poor self-regulation and academic dishonesty. When a student has actively engaged with the material through the workbook, they have already invested the cognitive effort required for learning. The completed workbook becomes a tangible record of their learning process, raising the stakes for submitting an AI-generated product and reducing the perceived need for it. Academic dishonesty, in this context, is no longer a convenient solution to a self-created problem but a contradiction to a visible and documented personal investment. By making the learning process transparent and accountable, the workbook alters the cost-benefit analysis of cheating, making dishonesty both more difficult and less appealing.

The workbook is a transitional pedagogy because it first installs and strengthens the human operating system – comprising metacognitive awareness and self-regulatory skill – that is prerequisite for any successful technological upgrade. It blocks unauthorized AI not just by rule, but by rendering it useless for the student who has developed the competence and confidence to learn without it. This foundation then allows for a future,

holistic model where AI can be introduced not as a substitute for these skills, but as a powerful amplifier of a now-resilient and self-directed learner.

Of course the workbook is one specific, effective tactic within a larger required strategy of motivating students and re-designing pedagogical approaches for the AI age. And this is not enough for a comprehensive solution to the problem, since the latest technologies and achievements undoubtedly contribute to progress and development and, therefore, in no case, even within the framework of a state institution, should they be opposed by teachers. It seems necessary to find a compromise that will increase the effectiveness of the use of AI in linguistic education of a non-linguistic profile and restore the unity of teaching and learning which is considered the key factor in professional development.

Conclusion

The use of AI in teaching foreign languages from the point of view of students is inevitable. Students will definitely use AI, and the teacher's task is to point out methodologically sound ways of using it (Yang, 2024). Teachers need to identify certain aspects of the process of mastering a foreign language that do not require the use of AI, and in the development of which AI can only harm students. The teacher must point out when AI can help students in the process of mastering a language and teach them how this can be achieved most effectively, that is, teach them to use AI technologies properly. All this can be realized only if students have a special personal motivation to learn a foreign language. In its absence, the teacher faces a different task – to transform the learning process in such a way that will allow students to deliberately exclude the incorrect use of AI technologies. This can be realized by creating a different paradigm of tasks and exercises, developing certain types of learning activities that exclude the possibility of non-educational usage of AI.

AI significantly transforms the modern landscape of language education, in which it appears in two completely opposite roles. On the one hand, AI is a means of increasing the effectiveness of linguistic education in the field of teaching foreign languages, and on the other hand, it is an obstacle to language acquisition in the learning process being used non-educationally. The mission of a modern teacher is to correct this situation, to take certain actions aimed at using the advantages of AI for the benefit of not only the teaching process, but also the learning of foreign languages. Only the restoration of teaching and learning unity by excluding non-educational usage of AI allows making the educational process effective, meaningful and productive.

Statement on the Use of AI Tools | *I declare on my own responsibility that the article is the result of my own work, and no other sources were used, other than those mentioned in the article. I also declare that no AI tools (such as language models, text generators, or other automated content creation tools) were used in the writing, editing, or any other aspect of my manuscript.*

References

- Alpaydin, E. (2014). *Introduction to machine learning*. Cambridge, MA: The MIT Press.
- Banerjee, D. (2020). Natural Language Processing (NLP) simplified: A step-by-step guide. *Data Science Foundation*.
<https://datascience.foundation/sciencewhitepaper/natural-language-processingnlp-simplified-a-step-by-step-guide>
- Berendt, B., Littlejohn, A. & Blakemore, M. (2020). AI in education: Learner choice and fundamental rights. *Learning, Media and Technology*, 45(3), 312-324.
<https://doi.org/10.1080/17439884.2020.1786399>
- Bjork, R. A. (1994). Memory and metamemory considerations in the training of human beings. In Metcalfe, J. & Shimamura, A. P. (Eds.), *Metacognition: Knowing about knowing*. Cambridge, MA: The MIT Press (pp. 185-205).
https://bjorklab.psych.ucla.edu/wp-content/uploads/sites/13/2016/07/RBjork_1994a.pdf
- Celik, I., Dindar, M., Muukkonen, H. & Järvelä, S. (2022). The promises and challenges of Artificial Intelligence for teachers: a systematic review of research. *TechTrends*, 66, 616-630. <https://doi.org/10.1007/s11528-022-00715-y>
- Chen, L., Chen, P. & Lin, Z. (2020). Artificial Intelligence in education: A review. *IEEE Access*, 8, 75264-75278.
<https://doi.org/10.1109/ACCESS.2020.2988510>
- Evstigneev, M. N. (2024). Principles of teaching foreign languages based on artificial intelligence technologies. *Bulletin of Tambov University. Series: Humanities*, 29(2), 309-323. <https://doi.org/10.20310/1810-0201-2024-29-2-309-323>
- Flavell, J. H. (1976). Metacognitive aspects of problem solving. In Resnick, L. B. (Ed.), *The nature of intelligence* (pp. 231-235). Lawrence Erlbaum Associates.
<https://doi.org/10.4324/9781032646527>
- Haddad, S. (2021). The complex role of AI in exam marking. *Digital Learning*, 0723.
<https://www.thelpi.org/wp-content/uploads/2021/03/digital-learning-2021.pdf>
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.
<https://doi.org/10.4324/9780203181522>
- Healey, J. (2020). *Artificial Intelligence*. Thirroul: The Spinney Press.

- Heymann, H. W. (2005). Was macht Üben intelligent? *Pädagogik*, 57(11), 6-11.
<https://www.fachportal-paedagogik.de/literatur/vollanzeige.html?FId=3028272>
- International Center for Academic Integrity (ICAI). (2021). *The fundamental values of academic integrity*. (3rd ed.).
https://academicintegrity.org/aws/ICAI/asset_manager/get_file/911282?ver=1
- Karatas, F., Abedi, F. Y., Gunyel, F., Karadeniz, D. & Kuzgun, Y. (2024). Incorporating AI in foreign language education: An investigation into ChatGPT's effect on foreign language learners. *Education and Information Technologies*, 29, 19343-19366. <https://doi.org/10.1007/s10639-024-12574-6>
- Kim, S., Park, J. & Lee, H. (2019). Automated essay scoring using a deep learning model. *Journal of Educational Technology Development and Exchange*, 2(1), 1-17.
<https://doi.org/10.4018/978-1-7998-3476-2.ch003>
- Luckin, R., Holmes, W., Griffiths, M. & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. London: Pearson.
- Meurers, D. (2020). Natural language processing and language learning. In Chapelle, C. A. (Ed.), *The Concise Encyclopedia of Applied Linguistics*. Wiley-Blackwell.
<https://doi.org/10.1002/9781405198431.WBEAL0858>
- Novikov, D. (2004). *Statistical methods in pedagogical research (typical cases)*. Moscow: MZ-Press.
https://www.researchgate.net/publication/274390588_Novikov_DA_Statisticheskie_metody_v_pedagogiceskih_issledovaniyah_tipovye_slucay_M_MZ-Press_2004_-_67_s
- Popenici, S.A.D. & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(22). <https://doi.org/10.1186/s41039-017-0062-8>
- Race, P. (2001). *The lecturer's toolkit: A practical guide to learning, teaching & assessment*. Kogan Page.
- Rusmiyanto, R., Huriati, N., Fitriani, N., Tyas, N. K., Rofi'i, A., & Sari, M. N. (2023). The role of artificial intelligence (AI) in developing English language learner's communication skills. *Journal on Education*, 6(1), 750- 757.
<https://doi.org/10.31004/joe.v6i1.2990>
- Schmidt, T., & Strasser, T. (2018). Media-assisted foreign language learning – concepts and functions. In: Surkamp, C., Viebrock, B. (eds) *Teaching English as a Foreign Language* (pp.211-231). J.B. Metzler, Stuttgart.
https://doi.org/10.1007/978-3-476-04480-8_12
- Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.

- Strasser, T. (2021). AI in the EFL-classroom. Clarifications, potentials and limitations. In C. Lütge & T. Merse (Eds.) *Digital Teaching and Learning: Perspectives for English Language Education*. Tübingen: Narr Francke Attempto. <https://www.narr.de/digital-teaching-and-learning-perspectives-for-english-language-educa-18244/>
- Sysoev, P. V. (2024). Didactic properties and methodological functions of neural networks. *Perspectives of Science and Education*, 6(72), 672-690. <https://doi.org/10.32744/pse.2024.6.42>
- Sysoev, P. V., Filatov, E. M. & Sorokin, D. O. (2024). Feedback in foreign language teaching: from information technology to Artificial Intelligence. *Language and Culture*, 65, 242-261. <https://doi.org/10.22363/2618-8163-2024-22-2-300-317>
- Sysoev, P. V., Filatov, E. M., Evstigneev, M. N., Polyakov, O. G., Evstigneeva, I. A. & Sorokin, D. O. (2024). Matrix of artificial intelligence tools in linguo-methodological training of future foreign language teachers. *Bulletin of Tambov University. Series: Humanities*, 29(3), 559-588. <https://doi.org/10.20310/1810-0201-2025-30-2-336-351>
- Titova, S. V. & Timuryan, K. K. (2024). Intelligent agents in FL teaching: Typology, possibilities, challenges. *Language and Culture*, 65, 262-287. <https://doi.org/10.17223/19996195/65/12>
- Titova, S. V. (2024). Artificial Intelligence-based technological solutions in foreign language teaching: an analytical review. *Bulletin of Moscow University. Series 19. Linguistics and Intercultural Communication*, 27(2), 18-37. http://linguistics-communication-msu.ru/upload/iblock/022/56mlpmy9uogw2tpemjk17jwrqaxbbtt8/Ser_19_2024_2_18_38_Titova.pdf
- Tolstyh, O. M. (2023). The potential of Artificial Intelligence in language education: practical recommendations for teachers. *Horizons of Education: Proceedings of the IV International Scientific and Practical Conference*. Omsk: OGPU, 391-393. https://www.researchgate.net/publication/372743869_Potencial_iskusstvenogo_intellekta_v_azykovom_obrazovanii_prakticheskie_rekomendacii_dla_prepodavatelej
- UNESCO. (2021). *Rewired global declaration on connectivity for education*. <https://en.unesco.org/futuresofeducation/sites/default/files/2021-12/Rewired%20Global%20Declaration%20on%20Connectivity%20for%20Education.pdf>
- UNESCO. (2023). *AI and Education: Guidance for Policy-makers*. Especially sections on ethics and challenges. <https://www.unesco.org/en/articles/ai-and-education-guidance-policy-makers>
- Watters, A. (2021). *Teaching machines: The history of personalized learning*. MIT Press.

- Yang, A. (2024). Challenges and opportunities for foreign language teachers in the era of Artificial Intelligence. *International Journal of Education and Humanities*, 4(1), 39-50. [https://doi.org/10.58557/\(ijeh\).v4i1.202](https://doi.org/10.58557/(ijeh).v4i1.202)
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), 64-70. https://doi.org/10.1207/s15430421tip4102_2