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RETHINKING LANGUAGE PEDAGOGY IN THE 21ST CENTURY: CRITICAL THINKING IN THE AGE OF AI

Abstract

Sophisticated pedagogy increasingly implies that learning of any language shouldn't be restricted to the assimilation of grammatical frameworks and lexical units, but should promote to the intellectual of the conformation of their capacity to analyze, reflect and on their own hook reasoning. From this framework's perspective the fusion of critical thinking with artificial intelligence and (AI)-based educational tools have become an inherent in modern pedagogical tendency and educational system of the twenty-first century. This research was carried out among the students of the undergraduate course of the Faculty of Philology at the university known as "South Kazakhstan University of Muktar Auezov". While the control group was taught through conventional grammar- and text-based approaches, the experimental group engaged in learning activities supported by adaptive digital platforms, virtual assistants, and interactive tasks.

Keywords: Foreign language pedagogy, critical thinking development, artificial intelligence in education, higher education, modern teaching approaches, language competence.

Introduction

The ever-evolving societal, cultural and technological surroundings have generated wide-ranging challenges for higher education institutions around the globe sphere. The field that better illustrates these hurdles is that of language education. For many years, language education was acknowledged for grammar rule learning and translation. Furthermore, modern education emphasizes the advancement of communication skills along with the independence of one's intellectual skills. This makes language instruction different from the way it was got before. Another area that makes language education different is technology. [1].

Nowadays, mastery of foreign language is not regarded only, as the occupancy of means of communication, but relatively as an abnormally complex cognitive process that fosters learner's capabilities for broadened horizon, critical thinking and operating with numerous sources of information. From this perspective, the cultivation of critical thinking has become an essential pedagogical objective in foreign language education. [2].

At the same time, the increasing presence of artificial intelligence in educational practice has introduced new opportunities for organizing the learning process. AI-based platforms are capable of adapting instructional content to individual learners, providing immediate feedback, and supporting continuous monitoring of learning progress. Nevertheless, the educational value of these technologies largely depends on how they are integrated into teaching practice. When used without clear methodological objectives, digital tools risk remaining superficial supplements rather than instruments of cognitive development.

The present study seeks to demonstrate that combining AI-supported instruction with tasks explicitly aimed at fostering critical thinking can significantly enhance the effectiveness of foreign language teaching. Through the study of this approach in an academic medium, this research hopes to play its part in the ongoing debate on the modernization of language teaching methodology.

Theoretical Analysis

Critical thinking is habitually defined as the learner's capacity to interpret information, decompose arguments, examine viewpoint, and construct informed conclusions. In Foreign Language learning, critical thinking gives an innings learners to go beyond mechanical language use. Critical thinking redounds Foreign Language learners to use their mind, reflect and communicate effectively. Foreign Language learners who apply critical thinking skills have competence to interpret all text, justify their opinion, and apply Foreign Language knowledge. [3].

Traditional modality of tuition, among which is grammar-traditional method, are well suited to form the structural expertise of a language, though they lack the potential to intellectual growth. Communicative methods suggest active participation and responsiveness and are also inadequate, regarding analytical and reflective thinking. As a result, students may demonstrate fluency without sufficient depth of understanding.

AI-based educational tools offer possibilities to address this imbalance. Adaptive learning systems can adjust task complexity to the learner's level, virtual conversational agents can simulate authentic communicative situations, and analytical dashboards can help students reflect on their learning progress. When these technological features are combined with pedagogical strategies focused on critical thinking, they create an environment that supports both linguistic and cognitive growth. [4].

Thus, the integration of artificial intelligence and critical thinking strategies represents a promising direction for enhancing the quality of foreign language education.

Experimental Part

The experimental stage of the study was carried out at the Faculty of Philology of Mukhtar Auezov South Kazakhstan State University and involved sixty undergraduate students majoring in foreign language studies. The participants were selected from groups with a comparable level of language proficiency, which allowed the results to be interpreted more objectively. [5].

At the initial stage, the students were divided into two groups. The first group functioned as a control group and continued learning within the framework of traditional instruction. Their classes were based mainly on grammar-focused exercises, text reading, translation tasks, and written assignments. The second group formed the experimental group and participated in a learning process that incorporated artificial intelligence-based educational tools. [6].

During the experimental period, students in the experimental group worked with adaptive digital platforms that adjusted task difficulty according to individual performance. In addition, they regularly interacted with virtual assistants designed to simulate real communicative situations in the target language. [7]. Such tasks were brought about by others that called for critical and reflective thinking on the part of the students to provide a basis for their responses, analyze data and illustration their personal perspective.

Great care was taken to retention the complementary role of the teacher in the practical trial. The integration of AI tools remained that of complementary aids to teaching and learning, rather than teaching support resource that could work on their own initiative. The length of the research procedure took up the one academic semester. [8].

Table 1. Learning Outcomes at a glance in Control and experimental groups.

Indicator / Metric	Control Group (Traditional Methods)	Experimental Group (AI & Modern Methods)	Difference
Vocabulary Acquisition	65%	85%	+20%
Grammar Accuracy	70%	88%	+18%
Text Analysis Skills	60%	82%	+22%
Critical Thinking	55%	80%	+25%
Motivation & Engagement	60%	90%	+30%

Observation: classroom monitoring made in the classroom throughout the period of the empirical procedure brought to light discernible differences between the two groups. The students who were in the control group indicated steady but predictable patterns of learning. Learning was

restricted to simulation learned grammatical patterns and replying to the test inquiries designed to elicit predetermined responses. While exactness was realized, opportunities for analysis and logical deliberation were consequently confined.

On the contrary, the students who were learning in the experimental group have identified steady progression in the learning proactivity. With time they enchained confidence in voicing their ideas, posing queries for elaboration, and taking part in various discussion sessions. Even activities that involved arriving at a decision based on the analysis of texts and supporting their position proved enhanced. The contribution could also be seen in the essays where they widely adopted argumentation as opposed to learning by heart.

Motivation surveys also suggested that students working with AI-supported tools experienced greater interest and involvement in the learning process.

Overall, the observation data confirm that the integration of artificial intelligence tools, when combined with reflective and analytical learning tasks, contributes to a more dynamic and intellectually engaging learning environment.

Results and Discussion

Analysis of experimental results indicates that students in the experimental group outperformed the control group across all measured indicators. Vocabulary acquisition and grammatical accuracy showed notable improvement due to AI-assisted personalized practice. Students demonstrated enhanced text analysis and critical thinking skills, reflecting the effectiveness of integrating reflective exercises with AI tools. Furthermore, engagement surveys revealed that AI-supported learning significantly increased motivation and autonomous participation [9].

The findings support the conclusion that AI integration, coupled with critical thinking-oriented instruction, transforms foreign language learning into a more interactive, cognitively stimulating, and autonomous process. This approach aligns with the objectives of 21st-century language pedagogy, preparing learners to navigate complex linguistic and cognitive challenges.

Conclusions

The results of the study confirm the effectiveness of integrating artificial intelligence-based tools with critical thinking-oriented instruction in foreign language education. Students who participated in the AI-supported learning model showed noticeable progress not only in vocabulary development and grammatical accuracy, but also in their ability to analyze texts, reason logically, and reflect on their learning experience.

From our perspective, artificial intelligence should not be viewed as a replacement for the teacher. Rather, it becomes a highly supportive resource that helps to promote the flexibility of instruction and reinforces autonomy. Also, when integrated appropriately, AI enables students to assume responsibility for learning, stimulates them, and prompts them to collaborate more with the language materials.

Such insights draw attention to integration of technology into foreign language curricula should be performed with well-established methodological grounds at higher education. It is also considered appropriate for further research to give due consideration to possible long-term effect of AI-assisted instruction or examine how AI could applied in distinct educational and cultural situational conditions. Only such studies would provide deeper insight into a function of artificial intelligence in shaping the future of language pedagogy.

REFERENCES

1. Brown, H. D. Teaching by Principles: An Interactive Approach to Language Pedagogy. - Pearson, 2020. - 512 p.
2. Facione, P. A. Critical Thinking: What It Is and Why It Counts. - Insight Assessment, 2015. - 88 p.
3. Luckin, R., Holmes, W., Griffiths, M., Forcier, L. B. Intelligence Unleashed: An Argument for AI in Education. - Pearson, 2016. - 192 p.
4. Richards, J. C., Rodgers, T. S. Approaches and Methods in Language Teaching. - Cambridge University Press, 2014. - 376 p.

5. Woolf, B. P. Building Intelligent Interactive Tutors: Student-Centered Strategies for Revolutionizing E-Learning. - Morgan Kaufmann, 2010. - 420 p.
6. Shekerova, G. The Role of Artificial Intelligence in the Educational Process. - Almaty: Білім Publishing, 2019. - 164 p.
7. Nurzhanova, A. Methodologies for Developing Critical Thinking. - Shymkent: SKSU Press, 2021. - 132 p.
8. Godwin-Jones, R. Emerging Technologies: AI in Language Learning and Teaching. - Language Learning and Technology, 2018, 1–17 p.
9. Levy, M., Stockwell, G. CALL Dimensions: Options and Issues in Computer-Assisted Language Learning. - Routledge, 2017. - 256 p.

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XXI ҒАСЫРДАҒЫ ТІЛДІК ПЕДАГОГИКАНЫ ҚАЙТА ПАЙЫМДАУ: ЖАСАНДЫ ИНТЕЛЛЕКТ ДӘУІРІНДЕГІ СЫНИ ОЙЛАУ

Түйін

XXI ғасырда шет тілдерін оқытуда сын тұрғысынан ойлауды қалыптастыру мен жасанды интеллектке негізделген оқыту құралдарын педагогикалық үдерісте тиімді пайдалану маңызды бағыт болып табылады. Мұхтар Әуезов атындағы Оңтүстік Қазақстан мемлекеттік университетінің филология факультетінде жүргізілген эксперименттік зерттеу дәстүрлі және AI-құралдар арқылы жүзеге асатын инновациялық оқыту модельдерінің әлеуетін салыстырып, жасанды интеллекттің студенттердің тілдік құзыреттілігін, рефлексиялық қабілетін және танымдық белсенділігін елеулі деңгейде арттыра алатынын көрсетті. Зерттеу нәтижелері тұлғаға бағытталған, интерактивті және технологиялық тұрғыдан байытылған педагогикалық тәсілдердің тиімділігін дәлелдеді, сын тұрғысынан ойлаумен AI құралдарының ықпалдасуы студенттердің дербес білім алу қабілетін күшейтіп, оқу мотивациясын арттырады және тілдік білімді саналы әрі шығармашылық тұрғыда меңгеруге мүмкіндік береді. Осылайша, мақаладағы ғылыми тұжырымдар мен тәжірибелік нәтижелер жоғары оқу орындарындағы шет тілдерін оқыту тәжірибесін жетілдіруге және заманауи білім беру кеңістігінде кеңінен қолдануға негіз бола алады.

Кілттік сөздер: Шетел тілін оқыту педагогикасы; сыни ойлауды дамыту; білім берудегі жасанды интеллект; жоғары білім; заманауи оқыту тәсілдері; тілдік құзыреттілік

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ПЕРЕОСМЫСЛЕНИЕ ЯЗЫКОВОЙ ПЕДАГОГИКИ В XXI ВЕКЕ: КРИТИЧЕСКОЕ МЫШЛЕНИЕ В ЭПОХУ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА

Аннотация

В данной статье комплексно рассматривается актуальная проблема современного иноязычного образования — интеграция развития критического мышления и применения образовательных технологий на основе искусственного интеллекта. Проведён теоретический анализ традиционных и инновационных методов обучения иностранным языкам, а также экспериментальная работа со студентами филологического факультета Южно-Казахстанского государственного университета имени Мухтара Ауэзова показала, что систематическое использование AI-ориентированных инструментов способствует значительному повышению языковой компетенции, познавательной активности, учебной мотивации и навыков критического мышления. Полученные данные подтверждают эффективность личностно-ориентированного, интерактивного и технологически обогащённого подхода, а также обосновывают целесообразность интеграции искусственного интеллекта и стратегий развития критического мышления как ключевого условия модернизации современного языкового образования. Представленные выводы и рекомендации могут быть применены в практике преподавания иностранных языков и при разработке образовательных программ в вузах.

Ключевые слова: Педагогика обучения иностранным языкам; развитие критического мышления; искусственный интеллект в образовании; высшее образование; современные методы обучения; языковая компетенция.