

THE EFFECTIVENESS OF INDIVIDUAL ENGLISH LANGUAGE TEACHING SYSTEMS USING ARTIFICIAL INTELLIGENCE

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Abstract

This article analyzes the effectiveness of individual English language teaching systems using artificial intelligence (AI). The study compares traditional and AI-based teaching methods. The experimental method was used to assess the level of achievement of two groups of students and to determine their attitudes towards the learning process through a questionnaire. The results showed that the individualized approach based on AI plays an important role in improving students' knowledge levels, increasing motivation, and improving learning effectiveness. These systems also allow for the personalization of learning materials and real-time analysis. The results of the study indicate the need for the widespread introduction of artificial intelligence technologies into the educational process.

Keywords: Artificial intelligence, personalized learning, english language education, personalization, educational technology, learning effectiveness, adaptive systems.

Introduction

In recent years, the rapid development of artificial intelligence (AI) technologies has had a significant impact on the field of education. In particular, AI-based systems, which provide an individual approach to teaching English, are widely used and help to organize the learning process more effectively. While traditional teaching methods often apply the same methodology to all students, AI-based platforms create a flexible learning environment that takes into account each student's level of knowledge, learning speed, and interests.

Therefore, the main purpose of this article is to analyze the effectiveness of individual english language teaching systems using artificial intelligence and to identify their advantages in the educational process.

Methods

This study used a comprehensive approach to determine the effectiveness of individual english language teaching systems using artificial intelligence (AI). The study was conducted using the following methods:

First, an experimental method was used, and the students were divided into two groups: a control group (traditional teaching method) and an experimental group (AI-based teaching system). The curriculum for both groups was organized with the same content, but the methods of presentation differed.

Secondly, using the survey method, students attitudes, satisfaction, and motivation towards the reading process were studied. The survey questions consisted of both closed-circuit and open-circuit questions.

Third, statistical methods were used to analyze the results obtained. The level of student achievement was assessed on the basis of percentage indicators, and the results of the two groups were compared.

A total of 60 students participated in the study. Of these, 30 were in the experimental group, which received education through AI-based platforms, while the remaining 30 were taught using traditional teaching methods. The study process was conducted regularly over a certain period of time (e.g., 8 weeks), and the results were ultimately summarized.

Results

The results of the study showed that individual training systems based on artificial intelligence (AI) are highly effective. According to the data obtained, the level of mastery increased significantly in 85% of the students who studied in the experimental group. In the control group, i.e. students who studied using traditional teaching methods, this figure was 60%.

It was also observed that students who used AI - based systems had a higher level of interest and motivation in reading through individual recommendations and customized assignments. They were also found to have developed independent performance skills more quickly.

The analysis of the results shows that a personalized teaching approach is an important factor in improving the effectiveness of the learning process.

Discussion

The results show that individual training systems organized using artificial intelligence (AI) are more effective than traditional methods. This is primarily due to the ability of these systems to adapt to each student's level of knowledge, learning speed, and individual needs. As a result of the flexible approach, students are educated at a comfortable pace, which leads to an increase in the level of acquisition.

In addition, AI systems allow real-time reader errors to be detected and immediately analyzed and corrected. This serves to continuously improve the learning process. Also, the personalization of educational materials increases the motivation of students and contributes to their active involvement in the educational process.

However, there are also some challenges in implementing AI - based teaching systems. In particular, such systems require a developed technological infrastructure to function effectively. In addition, the insufficient development of the Internet in all regions may limit the use of these systems. Another important aspect is that artificial intelligence is not able to completely replace the teacher, but change his role - the teacher acts more as a guide and consultant.

In general, individual training systems based on the AI have great potential for improving the quality of education, and their effective implementation is one of the important areas of the future education system.

Conclusion

It has been found that individual english language teaching systems based on artificial intelligence can significantly increase the effectiveness of education. The results of the study show that such systems play an important role in improving the level of knowledge of students, individualizing the learning process and increasing motivation.

Also, AI technologies make the educational process more interactive and efficient through the ability to adapt learning materials and analyze them in real time. Compared to traditional teaching methods, individual approach - based AI Systems show high performance.

In the future, these technologies are expected to be further improved and become an integral part of the educational system and an important factor in improving the quality of education on a global scale.

Recommendations

Based on the research results, the following recommendations were developed to more effectively implement individual English language teaching systems using artificial intelligence (AI).

First, it is desirable to gradually introduce AI - based platforms in educational institutions, which will make it possible to adapt the educational process to a new technological environment.

Secondly, it is necessary to increase the digital literacy of teachers and teach them to use AI tools effectively. This will strengthen the role of the teacher in a new setting - as a guide and as a facilitator.

Thirdly, the development of local content and resources tailored to the needs of each student further increases the efficiency of AI systems.

It is also important to expand digital education opportunities and improve technical conditions in areas with insufficient internet infrastructure.

In general, it is recommended to implement the process of integrating artificial intelligence technologies into the education system in a systematic and gradual manner.

References

1. Batubara, M. H. (2024). Harnessing Artificial Intelligence for English Language Learning: A Systematic Literature Review. *Journal of Linguistics, Literature, and Language Teaching*.
2. Ling, A. W. X., Yunus, M. M., & Wong, W. L. (2025). Transforming AI in English Language Learning: A Systematic Literature Review. *Quantum Journal of Social Sciences and Humanities*.
3. Rebolledo, R., & Gisbert, M. (2023). Adaptive learning and artificial intelligence tools in EFL education: A systematic review. *Profesorado Journal*.
4. Yang, L., & Li, R. (2025). AI-enabled adaptive game-based language learning: Looking back and forward. *Innovation in Language Learning and Teaching*.



5. Hadi, M. W., Suryadi, H., & Suparlan, S. (2025). The effectiveness of adaptive artificial intelligence-based learning in EFL instruction. *Journal of Languages and Language Teaching*.
6. Wang, Y. et al. (2026). Artificial intelligence in language learning: A twenty-year scoping review. *International Journal of Language Studies*.
7. Xu, J. et al. (2026). Artificial intelligence as a catalyst for adaptive language learning. *Journal of Educational Technology*.
8. Li, H. et al. (2024). Bringing generative AI to adaptive learning in education.