

INTEGRATING ARTIFICIAL INTELLIGENCE INTO THE DEVELOPMENT OF ENGLISH SPEAKING SKILLS: BASED ON THE APPLICATIONS ELSA SPEAK AND SPEECHACE

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INGLIZ TILIDA GAPIRISH KO'NIKMASINI RIVOJLANTIRISHDA SUN'IY INTELLEKTNI INTEGRATSIYA QILISH: ELSA SPEAK VA SPEECHACE ILOVALARI ASOSIDA

ИНТЕГРАЦИЯ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В РАЗВИТИЕ НАВЫКОВ УСТНОЙ РЕЧИ НА АНГЛИЙСКОМ ЯЗЫКЕ: НА ПРИМЕРЕ ПРИЛОЖЕНИЙ ELSA SPEAK И SPEECHACE

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Annotatsiya: Mazkur maqolada ELSA Speak va Speechace sun'iy intellekt ilovalari asosida ingliz tilida gapirish ko'nikmasini rivojlantirishning samarali usullari va pedagogik asoslari yoritiladi. Ularning dars jarayoniga integratsiyasi tahlil qilinadi.

Kalit so'zlar: sun'iy intellekt, ingliz tili, talaffuz, gapirish ko'nikmasi, ELSA Speak, Speechace, AfL, audio-artikulyatsiya, o'rganish, baholash, interaktiv ta'lim, mustaqil mashg'ulot.

Abstract: This article explores effective methods and pedagogical principles for developing English speaking skills using AI-based applications ELSA Speak and Speechace. It analyzes their integration into classroom instruction and individualized learning environments.

Key words: artificial intelligence, English language, pronunciation, speaking skills, ELSA Speak, Speechace, AfL, audio-articulatory, learning, assessment, interactive learning, independent practice

Аннотация: В статье рассматриваются эффективные методы и педагогические основы развития навыков устной речи на английском языке с использованием ИИ-приложений ELSA Speak и Speechace. Анализируется их интеграция в образовательный процесс.

Ключевые слова: искусственный интеллект, английский язык, произношение, навыки речи, ELSA Speak, Speechace, AfL, аудио-артикуляция, обучение, оценивание, интерактивное обучение, самостоятельная практика.

Introduction

As artificial intelligence continues to transform the educational landscape, AI-powered applications such as ELSA Speak and Speechace have emerged as essential resources in second language acquisition. Speaking, one of the most challenging skills in language learning, requires consistent practice, immediate feedback, and accurate pronunciation. Traditional classroom methods often fall short in providing individualized pronunciation support. AI tools bridge this gap by enabling real-time assessment and continuous feedback outside classroom hours. This paper investigates the integration of ELSA Speak and Speechace into a 'Speaking Skills Integration' course for second-year university students in Uzbekistan and highlights their effectiveness in improving English speaking proficiency.

Methodology

This study employed a mixed-methods design combining classroom-based implementation, feedback collection, and qualitative analysis. The 'Speaking Skills Integration' course consisted of 30 thematic lessons across six weeks. Seven AI platforms were introduced, but this paper focuses on two tools—ELSA Speak and Speechace—due to their emphasis on pronunciation training. Students were guided through initial onboarding sessions, followed by weekly assignments involving structured pronunciation practice using the apps. Instructors monitored usage patterns and collected feedback via surveys and interviews. Analysis focused on student progress, user experience, and alignment with pedagogical frameworks such as the Audio-Articulatory Method (AAM) and Assessment for Learning (AfL).

Results and Discussion

The study highlights the unique strengths of ELSA Speak and Speechace in improving English oral proficiency.

ELSA Speak Functionalities. ELSA (English Language Speech Assistant) Speak is a mobile application that employs speech recognition and AI algorithms to analyze learners' pronunciation, stress, rhythm, and intonation. It supports over 1,600 lessons tailored to CEFR levels. ELSA provides phoneme-level feedback, highlighting specific errors in sound articulation. It integrates effectively with the Audio-Articulatory Method by focusing on the physical production of sounds such as [θ], [ð], and [ʃ], using visual diagrams and video instructions to correct articulation. Learners receive star ratings and progress tracking based on performance.

Speechace Functionalities. Speechace is a browser-based AI tool that evaluates spoken responses through four key metrics: pronunciation, fluency, grammar, and vocabulary. Scores range from 0 to 9 for each component. Speechace is well aligned with the Assessment for Learning (AfL) principle. It provides formative feedback after each task and allows repeated attempts to improve performance. Speechace's grammar recognition system can detect errors in tense usage, subject-verb agreement, and sentence structure. Its visual dashboard displays stress markers and waveform analysis to help learners identify mispronunciations.

Students reported increased motivation and awareness of their pronunciation problems. ELSA's gamified interface and clear feedback encouraged daily practice, while Speechace's academic structure aligned well with classroom testing and oral presentations. Both tools enabled learners to improve self-monitoring and correct errors without teacher intervention. The tools also reduced teacher workload by automating initial pronunciation evaluations and allowing formative assessment outside class hours.

Comparison of ELSA Speak and Speechace Features *Table 1.*

Feature	ELSA Speak	Speechace	Pedagogical Alignment
Real-Time Feedback	Yes	Yes	Formative Assessment
Pronunciation Accuracy	Yes	Yes	Audio-Articulatory Method
Fluency Evaluation	No	Yes	AfL Principle
Grammar Detection	No	Yes	AfL Principle

Stress & Intonation Analysis	Yes	Yes	Pronunciation-Based Approach
Visual Articulation Guides	Yes	No	Audio-Articulatory Method
Gamification	Yes	No	Learner Motivation
Score Tracking	Yes	Yes	Self-Monitoring & Feedback

Conclusion

Incorporating AI-based tools like ELSA Speak and Speechace into English speaking classes enhances learners' pronunciation, confidence, and autonomy. These tools provide scalable, individualized support that traditional classroom instruction often lacks. By aligning with pedagogical methods such as the Audio-Articulatory and AfL frameworks, they ensure both accuracy and learner agency. The study concludes that a multi-tool approach combining the strengths of different AI platforms offers the best outcomes for communicative competence development.

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