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## **Enhancing English Speaking Fluency in future EFL teachers through Voice Chatbot-Based AI Using SmallTalk Me: A component of Digital Literacy Development**

This article investigates an enhancement of English-speaking fluency by using an AI — based chatbot as a component of digital literacy development. The aim of the research is to examine the effectiveness of integrating a SmallTalk2me chatbot in the training of future EFL teachers. The study adopts a mixed methods approach, including interviews, surveys and analysis of students' learning outcomes. The experiment was carried out in two groups. The experimental group was engaged with the use of the SmallTalk2Me chatbot in class, while the control group was taught by conventional methods. The results indicate that the experimental group exhibited a significantly higher level of motivation for learning than the control group. Analysis of the results demonstrates a substantial contribution of an AI-based SmallTalk2Me platform to learners' speaking fluency, motivation and engagement in the learning process. Observations revealed that AI based chatbots should be included into English language teachers training programs. The relevance of this research may considerably influence the development of AI-based education and digital literacy skills, especially in remote areas within the country with the lack of foreign language teachers.

*Keywords:* digital literacy, SmallTalk2Me, EFL teachers, language curriculum, foreign language anxiety, gamification, stimulated conversations, English speaking fluency, phonetic accuracy

### *Introduction*

The development of digital technology has had a significant impact on the teaching of foreign languages and the training of foreign language teachers. In the context of teaching foreign languages, the ability to use digital technology, evaluate web-based information, and incorporate technology into the teaching process has emerged as a key competency for the foreign language teachers. One of the available technologies with a great teaching potential is a “chatbot” based on AI.

Digital literacy skills for a teacher education involve information literacy, communication and collaboration skills, ethical and appropriate usage of technology in a digital environment [1]. For future foreign language educators, these skills can be considered paramount due to the increase in digital platforms and applications used in language acquisition.

Chatbots have become increasingly popular among educational institutions as a machine learning and artificial intelligence become increasingly sophisticated, proving valuable tools in the education sector. A chatbot is a text-based, conversational AI agent. Through conversation, a chatbot can provide guidance, advice, and resolve questions and concerns on any topic. In this context, the integration of Voice Chatbot-based AI in language classrooms is increasingly being explored for its potential to enhance speaking fluency, particularly among English as Foreign Language (EFL) learners.

The 21st century is the era of digital development, which provides people with rapid and accessible ways of improving all these aspects of speaking fluency. AI Chatbots offer a wide range of opportunities to boost fluent speaking flow and natural usage of language [2].

This study investigates the implementation of SmallTalk2Me, a voice chatbot platform designed to simulate authentic conversation scenarios among university students. The platform provides structured speaking tasks categorized into conversational, academic, and business contexts, aligned with B2-level proficiency standards. Through a controlled experimental design involving students, the research evaluates the pedagogical effectiveness of the tool in improving learners' speaking fluency.

The article is grounded in second language acquisition theories that emphasize interaction, comprehensible input, and output as critical elements in developing fluency. It contributes to the growing AI-enhanced language learning by offering empirical evidence on the learner engagement, performance outcomes, and motivational shifts associated with a chatbot-based instruction. The findings not only address the practical need for scalable speaking interventions but also inform future integration of AI tools in curriculum design, particularly in under-resourced educational settings.

Speaking fluency is a critical component in second language acquisition. As defined by Færch and Kasper (1983), fluency involves the ability to communicate meaningfully and coherently without undue hesitation [3]. Krashen's Input Hypothesis (1985) emphasizes the importance of comprehensible input, while Swain's Output Hypothesis highlights the role of spoken production in language learning [4].

Moreover, the Interaction Hypothesis argues for the importance of interaction in language development. Voice chatbot technology utilizes AI to engage users in spoken dialogue. These tools offer language learners a simulated conversation partner, allowing for practice that is both autonomous and adaptive. Studies by Çakmak (2022) and Azizimajd (2023) demonstrate how chatbots can reduce speaking anxiety and enhance performance [5].

Implementing chatbots reflects a holistic approach to communication skills development. Speaking is a crucial part of language learning. It is a key factor that supports both personal and professional growth. AI Chatbots propose a modern solution to help strengthen speaking skills, providing various types, exercises, and techniques. The most popular method for improving speaking and pronunciation is the shadowing technique [6].

This research illustrates how video-based shadowing and tracking pronunciation exercises develop fluency, specifically physical aspects, such as pronunciation and intonation of L2 sounds [7].

There are many globally popular AI Chatbots with the shadowing method, like Langua, Speak, and Talkpal. These AI Chatbots offer a wide range of features to fulfill diverse interests and needs. Firstly, they offer real-time conversations comprising different topics. TalkPal provides daily life scenarios, such as ordering food, job interviews, and casual dialogues. Speak integrated gamification elements, like badges and rewards for completing tasks. They allow learners to mimic native speakers' speech to improve intonation and obtain natural rhythm.

Teaching to improve speaking skills is difficult for students and teachers [8]. Students face some obstacles during speaking practice sessions in the classroom due to a lack of confidence. They have a low self-esteem and feel bored practicing communication with teachers and other students in daily life. To solve these problems, teachers apply proper media to communicate through pictures. The use of the picture in the classroom provides a stimulating focus for students' attention. The picture increases learners' attention and interest to sustain the spirit in the learning process [9]. AI Chatbots provide learners with the feature of conversation with pictures, like ChatGPT with DALLÉ, Mondly AI, and Duolingo Max. The Chatbots display an image that students describe and answer the questions or create a story according to it. Moreover, learners are provided with a real-time feedback on grammar, vocabulary, and pronunciation.

The most essential factor of AI Chatbots is the gamification feature. Nurutdinova et al. emphasize the phenomenon of gamification, highlighting its role in teaching and working with materials in digital environment. In addition, gamification is a universal phenomenon in a modern society with its focus on multimedia technologies, game approaches, and certain innovativeness of the teaching process [10]. AI Chatbots incorporate a gamification element with their game-based display.

Gamified features in AI Chatbots:

1. Point Systems and rewards given to learners for completing speaking tasks and achieving a new level;
2. Quests, AI Chatbots provide speaking challenges, like role-playing scenarios or time-limited tasks;
3. AI Chatbots are structured with progression and levels; they are leveled up to improve speaking.

In the context of education, AI is being progressively discovered as a gifted tool to support and enhance language learning, mainly in advancing learners' speaking performance. AI offers the possibility for personalized, collaborative, and adaptive learning experiences that cater to individual learners' needs and preferences [11].

AI Chatbots have an increasing popularity in the education field with their ability to improve speaking skills. AI Chatbots share similar interfaces, rules, and features, but to choose the best one, we should understand the mechanisms. AI Chatbots focus on enhancing grammar, pronunciation, intonation, and vocabulary while developing speaking skills. Different chatbots provide users with diverse facilities, and there is a big possibility that they might share the same features, but their style and feedback will be different. To be pro-

vided with the most effective chatbot, it is necessary to learn specifically about its characteristics and compare them with one another. Evaluating features like feedback mechanism, vocabulary enhancement, speaking rate analysis, and replay functions is the best option of an AI Chatbot to improve speaking skill fluency.

The article has shown that students who were working with a speech recognition system experienced exceptional gains in pronunciation and oral fluency compared to those who did not. Furthermore, students who participated in conversational activities using chatbots increased their confidence and the ability to sustain dialogues in English fluently [12].

Anxiety is a subjective experience marked by tension, worry, nervousness, and unease, often linked to the activation of the autonomic nervous system. Foreign language anxiety (FLA) refers to a specific type of situational anxiety that arises exclusively in the context of learning a foreign language, distinguishing it from other forms of anxiety. According to Tobias, the learning process may be categorized into three stages: input, processing and output. Anxiety affects learners' cognitive processes in multiple ways, thus influencing both the effectiveness and efficiency of the learning process. The research conducted by Zhang has demonstrated a positive impact of using GPT AI in verbal instruction for reducing anxiety. It reduces anxiety in several factors including listening, cognitive anxiety, communication anxiety, speaking and situational anxiety. It has beneficial effects on type I personality (MBTI personality test), which is a social phobia, and type E personality. The study unexpectedly revealed that GPT AI can serve as an emotional and cognitive supporter for lonely and vulnerable students in foreign language oral communication. It was discovered that AI robot foreign language coaches can efficiently improve learners' outcomes. GPT AI assists students to cope with language learning anxiety while providing motivational support [13].

One of the crucial benefits provided by AI Chatbots is the ability to build confidence. A non-judgmental environment provides students with less anxiety and stressful pressure in terms of speaking and answering questions. In addition, features like customized difficulty levels allow students to track their progress at their own pace without comparing it with other students' growth. Moreover, rewards, achievements, and progress indicators are the elements of gamification. They increase motivation and engagement during their learning process [14]. AI Chatbots include idiomatic expressions and phrasal verbs that are essential for specific contextual backgrounds, demonstrating cultural awareness of social norms and perspectives. The ability to culturally understand stress, both linguistic and cultural awareness, results in effective communication.

Smalltalk2me is an AI Chatbot application designed to assist users in improving their English-speaking skills, founded in 2021. It offers a wide range of features for enhancing speaking fluency with detailed and comprehensive feedback. The most outstanding characteristic of Smalltalk2me is its feedback, which comprises a set of complicated responses to all its features.

This chatbot is unique due to its vocabulary boost, which not only identifies and corrects mistakes but also increases the learner's vocabulary by providing high-level alternatives to these words. To understand new words, the chatbot illustrates in the table their simple versions with their levels. For example, if the word "tired" was used, Smalltalk2me suggests advanced alternatives, like "exhausted" with definition and context for each word. It provides students with nuanced and contextual characteristics. In addition, Smalltalk2me measures speaking rate with a clear indication. This encourages learners to adjust their tempo, fluency flow, and be natural while speaking a foreign language.

Pace comprises 3 levels: slow, normal, and fast. For instance, if the pace is under 90 words per minute, it indicates that the speech is boring. To achieve native-like fluency, the tempo should be in the range of 90 to 150; if it surpasses the range of 150, the speech is too fast to comprehend. Relying on this indicator, Smalltalk2me encourages learners to discover a balanced pace for clear speech.

Moreover, Smalltalk2me is designed with the ability to re-listen to recordings of learners' speech and see the tasks again. It provides an opportunity for students' development. By reviewing their recordings, they will recognize areas for improvement. This is the modern version of traditional reflective learning experience for constant improvement.

Another AI chatbot designed to improve speaking skills is Speak, but it lacks advanced feedback compared to SmallTalk2me. Speak provides learners with practical conversations, lacking full and comprehensive feedback. Vocabulary suggestions are basic, providing only spoken mistakes without offering alternatives. Synonym suggestions are essential for developing speaking fluency, and it will improve users' language skills drastically.

In addition, Speak chatbot lacks the feature of evaluating learners' speaking rate, which shows their speaking tempo and compares it with a native speaker's pace. The speaking rate component of the AI Chatbots is vital to learners' awareness of speaking tempo, which will result in the improving of fluency.

Moreover, Speak does not provide users to review recordings, which refers reflection and improving their performance.

The given research illustrated that one of the reasons for the “Mute English” phenomenon is a lack of practice and experience of speaking English in EFL classes. Despite speaking skills being included in the educational curriculum, the EFL classes concentrate on the written tasks. In addition, most EFL books focus on listening, writing, and reading assignments, without emphasis on speaking [15].

Talkpal is another AI-driven Chatbot, but its features are more limited in comparison with Smalltalk2me. Talkpal has a big number of parallels with Speak in terms of conversation practice, with limited feedback. The vocabulary feedback is rudimentary, concerning only some suggestions for improving speaking without offering contextual explanations and high-level alternatives, unlike Smalltalk2me AI. The speaking rate also lacks, limiting tempo adjustment. The features of reviewing the previous tasks and recordings are also missing, limiting reflection.

Tools like Talkpal AI, Rosetta Stone, Duolingo, Mango Languages, and Babbel are available in EFLT. The Talkpal AI provides a unique possibility for users to converse with native speakers in a real-time scenario. Talkpal AI has a good impact on improving English speaking fluency during the educational process [16].

Table 1 shows technical characteristics of Chatbots, like Smalltalk2me, Speak, and Talkpal, used in Kazakhstani education.

Table 1

Difference of Chatbot Features

Characteristics and functions	Smalltalk2me	Speak	Talkpal
Feedback Depth	Advanced feedback on grammar, vocabulary, pronunciation, and intonation	Basic feedback with limited explanations	Basic feedback, lacks depth
Vocabulary Enhancement	Synonyms, contextual alternatives, showing learner's level	Basic vocabulary suggestions	Basic vocabulary suggestions
Speaking Rate Analysis	Illustrating words per minute (slow, normal, fast)	No speaking rate feature	No speaking rate feature
Recording & Re-listening	Reviewing, re-listen to an audio; reviewing previous tasks	No re-listen feature	No re-listen feature
Grammar Improvement	Detailed explanations with context	Ground level corrections	Ground level corrections
Pronunciation Feedback	Detailed phonetic corrections	Limited pronunciation corrections	Limited pronunciation corrections
Intonation Feedback	Detailed intonation analysis	Basic intonation feedback	Basic intonation feedback

Based on the Chatbots' features, SmallTalk2me comprises the highest feedback characteristics. Comparing SmallTalk2me, Speak, and Talkpal Voice-based AI Chatbots, SmallTalk2me contains detailed feedback features, such as advanced feedback on grammar, contextual alternatives, and intonation corrections, which are the essential attributes that boost students' speaking skills fluency.

Hence, we are determined to apply SmallTalk2me in an experimental study to improve our students' speaking fluency.

#### *Methods and Materials*

This study employed a mixed-methods quasi-experimental design to evaluate the impact of the SmallTalk2Me voice chatbot on English-speaking fluency among university learners. The study utilized both quantitative and qualitative tools. Statistical analysis included paired t-tests to compare pre- and post-test fluency scores within and between groups. Thematic analysis was applied to open-ended responses to identify

fy patterns in student perceptions and motivation. The quasi-experimental design was conditioned by the inability to assign randomly, as the sample consisted of pre-existing academic groups.

The participants were 60 students from L.N. Gumilyov Eurasian National University in Astana city, divided into a testing group (n=30) and a control group (n=30) based on pre-existing groups.

Mean age of participants was 19-21 years. All participants had similar proficiency levels in English, confirmed via a standardized pre-test based on CEFR speaking descriptors. The students were of intermediate (B2) English proficiency. There were no statistically significant differences between the groups before the experiment started. All participants provided informed consent to participate in the research.

During the mixed-methods quasi-experimental design, the intervention tool was the SmallTalk2Me chatbot based on natural language processing technology (NLP), ensuring an ability to simulate real-time, voice-based interaction. For four weeks, the testing group engaged with SmallTalk2Me, while the control group received traditional speaking instruction. Students in the testing group used the chatbot during designated English lessons and as homework assignments over four weeks, engaging in daily dialogues aligned with their curriculum topics, which included four thematic categories: conversational, business, academic, and a small talk.

Evaluation of speaking level was conducted through pre- and post-intervention speaking tests, including monologic speech and a dialogue task (5-7 minutes), scored by two independent experts using the CEFR rubric for fluency. Qualitative data were obtained through interviews with teachers and a survey with students from a testing group.

Quantitative data were analyzed using paired and unpaired samples t-test. Statistical significance level was established at  $p > 0,05$ . Qualitative data were analyzed by thematic analysis (TA) method, highlighting recurring categories and interpretation of semantic patterns.

The instructional intervention was grounded in three major SLA theories: Krashen's Input Hypothesis, Swain's Output Hypothesis, and Long's Interaction Hypothesis. These theories emphasize the importance of exposure to comprehensible input, active language production, and meaningful interaction, which are embedded in the chatbot's design.

### *Results and Discussion*

According to the results, Table 2 shows no statistically significant difference before an experiment started ( $p > 0,05$ ). After four weeks of the experiment, there was a statistically significant increase in the speaking fluency of the testing group ( $p < 0,001$ ), while the control group showed statistical insignificance ( $p = 0,19$ ,  $t = 1,34$ ).

Table 2

**Students' speaking fluency before and after the experiment**

Group	N	Mean score before the experiment (M±SD)	Mean score after the experiment (M±SD)	p-value (before the experiment)	p-value (after the experiment)	t-value
Testing	30	6,18±0,84	7,42±0,76	>0,05	<0,001	6,12
Control	30	6,21±0,81	6,45±0,79	>0,05	0,19	1,34

Thus, obtained results indicate statistically significant improvement of variables in the testing group using a SmallTalk2Me chatbot.

The survey results revealed that students from the testing group showed higher engagement and motivation compared to the control group. Particularly, 85 % of participants noted that using a chatbot was very interesting and engaging.

One notable factor contributing to this elevated engagement was the novelty and autonomy offered by the SmallTalk2Me chatbot platform. Learners appreciated the flexibility to engage in speaking practice at their own pace and at convenient times. The chatbot's capacity to simulate real-life conversations and offer immediate feedback created a dynamic learning environment that many participants found stimulating. Several students commented that the AI felt like a "non-judgmental partner," helping them overcome language

anxiety, a common barrier to fluency development. The post-test in the testing group showed a great improvement compared to the pre-test.

Fluency was assessed across three major dimensions: speech rate, coherence, and lexical richness. Each of these showed statistically significant gains in the testing group (Diagram 1). Moreover, the average number of spoken words showed 23 % growth, while the control group showed only 9 % growth. Coherence, assessed by coherent structure and link of ideas, showed 28 % growth in the testing group, while the control group rose by 11 %. Analyzing the lexical richness, including the lexical diversity ratio and frequency of higher-level vocabulary, a 33 % increase was shown in the control group, and a 14 % increase was shown in the testing group.

### Results of Speaking Fluency

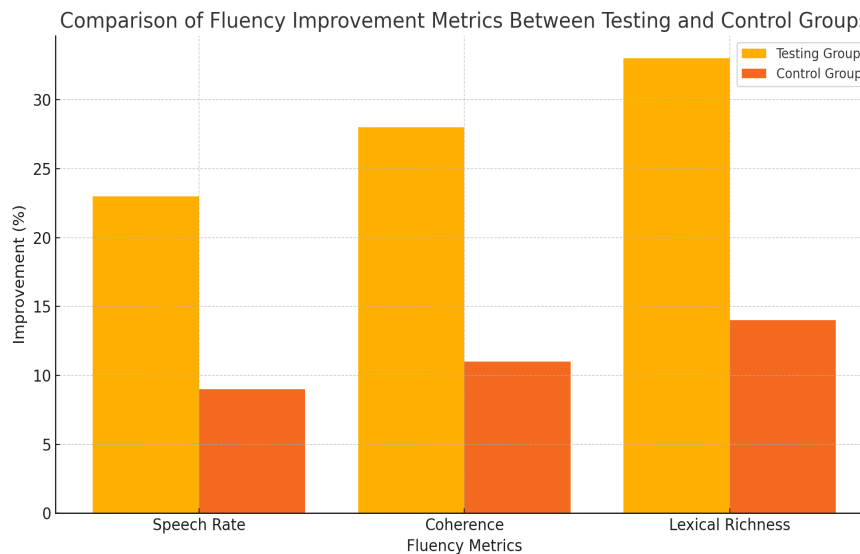


Diagram 1

These results firmly indicate that AI-based speaking practices promote more enhanced and more frequent verbal output, which corresponds with Swain's Output Hypothesis. Learners obtained information as well as dynamically produced substantial oral communication, a pivotal criterion for increasing fluency. Both groups showed progress over a period. The distinction in magnitude and quality of this increase was considerably substantial.

The SmallTalk2Me platform facilitates learners to participate in various conversations, business, academic, social, and small talk, thus encouraging language variation and pragmatic language use. This is essential in an educational environment, where authentic speaking opportunities are not available. Moreover, variety in themes and the chatbot's adjustable answers gave learners a repeated experience to focus on structure and vocabulary. This recurring experience, merged with low-risk implementation, facilitated conditions beneficial to language incorporation and systematization of linguistic patterns.

Non-directive answers from the surveys strengthened the quantitative results. Students regularly shared increased confidence and a feeling of advancement. One survey applicant noted, "I used to hold back and think much before starting speaking, but now I can start to speak immediately". Another participant shared, "It was comfortable working with a bot, because I wasn't afraid of making mistakes".

Teachers noticed enhanced willingness within students of the testing group to take part in group discussions and speaking tasks. These observations encourage the hypothesis that SmallTalk2Me functions as an additional instrument to encourage students' frequent use of language in a more traditional environment.

### The comparative results between the control and testing groups

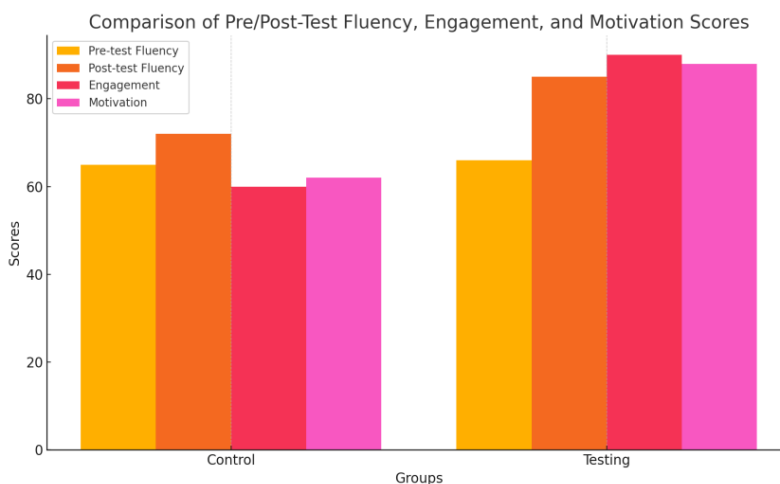


Diagram 2

The bar chart above demonstrates the results between the control and testing groups over four key measures. As seen from the pre-test fluency scores indicator, both groups started with similar levels of fluency. The indicator of post-test fluency scores shows that the testing group, which used SmallTalk2Me, showed substantially better progress from 63 % to 82 %. Analysing the engagement scores indicator, students in the testing group demonstrated increased involvement. Motivation Scores were also higher in the testing group (Diagram 2).

Despite promising results, there were certain limitations. The duration of the experiment was only several weeks; for better research, a long-term experiment is needed. The research data was obtained from a self-report, which may contain some inaccuracies. Also, the study was conducted only at one of the Kazakhstani universities, which is a specific feature. A global experiment could be conducted in the future.

Overall, the SmallTalk2Me chatbot demonstrated several benefits, including increased student motivation and engagement, the use of AI as a pedagogical tool, a significant increase in fluency, and the ability to receive feedback from students and teachers. These results offer practical support for further investigation of AI tools in language education and emphasize the significance of voice chatbot platforms as efficient, student-focused technologies.

### Conclusions

The experiment affirms that integrating SmallTalk2Me into the language curriculum increases speaking fluency in students. The results contribute to the increasing evidence base supporting AI-based language instruction.

AI chatbots have an essential potential for regular use in the Higher Education system due to their relevant features, including stimulated conversations mimicing real-life cases, from buying a ticket to business meetings, by providing language practice exercises.

One of the key measures of speaking fluency is obtaining clear pronunciation and intonation. SmallTalk2Me improves phonetic accuracy by correcting learners with the native speakers' pronunciation and giving feedback. It provides exercises until their pronunciation is as accurate as native speakers'. Moreover, the SmallTalk2me chatbot analyzes students' speech and gives them a pronunciation feedback, like the "th" sound, which can be difficult for non-native speakers to pronounce. Also, learners get feedback on stress on both syllables and words. Intonation is the essential part of acquiring a second language. SmallTalk2me provides extensive analysis of intonation patterns refines learners' emotional display and natural speech. It contains intonation tone patterns, pitch variations, rhythm problems, and additional recommendations for improvement of speaking fluency.

It is an ongoing process during speaking fluency improvement. AI Chatbots offer synonyms and word alternatives, which are dynamic word suggestions that encourage students to diminish the usage of commonly used words with advanced alternatives. Furthermore, chatbots offer word-level feedback, classifying vocabulary into basic, intermediate, and advanced levels to stress sections for advancement. Other chatbots stimulate contextual vocabulary, which explains the context in which the specific word should be applied. Moreover, chatbots acquire thematic learning approaches, like lessons focused on specific topics, such as

travel, business, and daily life. It stimulates students' ability to apply this context-specific vocabulary in various and appropriate environments.

It is the core of each language; without excellent comprehension of grammar, people will not be able to construct sentences in diverse languages. AI chatbots significantly help students apply grammatical knowledge with real-life error correction. Moreover, they provide information that helps to select appropriate grammar for a certain context. They offer the right word order, tenses, vocabulary, etc. The hardest part of speaking is to put the appropriate articles and prepositions. AI chatbots thereby provide feedback on correct task performance.

Teachers and policymakers should consider the pedagogical advantages of voice chatbots in language education. Future research may expand on this study by including more samples, longitudinal designs, and comparisons with other AI chatbots.

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## **Болашақ ағылшын тілі мұғалімдерінің ағылшын тілінде сөйлеу дағдыларын жасанды интеллект Voice Chatbot негізіндегі SmallTalk Me платформасы арқылы жетілдіру: цифрлық сауаттылықты арттыру компоненті**

Мақалада цифрлық сауаттылықты дамытудың құрамдас бөлігі ретінде жасанды интеллект негізіндегі чатботты пайдаланып, ағылшын тілінде еркін сөйлеуді жақсарту қарастырылған. Зерттеудің мақсаты ағылшын тілі пәнінің болашақ мұғалімдері үшін сыныпта SmallTalk2Me чатботын пайдаланудың тиімділігін анықтау. Зерттеуде сұхбат, сауалнама және оқушылардың оқу нәтижелерін талдау сияқты аралас әдіс қолданылды. Эксперимент екі топта жүргізілді. Эксперименттік топ сыныпта SmallTalk2Me чатботын пайдаланды, ал бақылау тобы дәстүрлі түрде жұмыс істеді. Нәтижелер эксперименттік топтың оқу мотивациясының деңгейі бақылау тобына қарағанда жоғары екенін көрсетті. Оқушылардың сөйлеу еркіндігі үш негізгі критерий бойынша бағаланды: сөйлеу жылдамдығы, логикалық үйлесімділік және лексикалық әртүрлілік. Эксперименттік топта үш көрсеткіште бақылау тобына қарағанда айтарлықтай жоғары болды. Нәтижелер жасанды интеллект негізіндегі SmallTalk2Me платформасы оқушылардың сөйлеу еркіндігін, мотивациясын және қатысуын айтарлықтай жақсартатынын көрсетті. Бұл зерттеулер жасанды интеллект негізіндегі чат-боттарды ағылшын тілі мұғалімдерін даярлау бағдарламаларына енгізу керек екенін айқындайды. Зерттеудің өзектілігі, әсіресе шетел тілі мұғалімдерінің жетіспеушілігі байқалатын елдің шалғай аудандарында жасанды интеллект негізіндегі білім беру мен цифрлық сауаттылық дағдыларын дамытуға айтарлықтай әсер етуі мүмкін.

*Кілт сөздер:* цифрлық сауаттылық, SmallTalk2Me, ағылшын тілін шетел тілі ретінде үйрететін мұғалімдер, ағылшын тілін оқыту бағдарламасы, шетел тіліне байланысты алаңдаушылық, ойын элементтерін қолдану, бастамашыл әңгімелер, ағылшын тілінде сөйлеу еркіндігі, фонетикалық дәлдік.

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## **Совершенствование беглости устной речи на английском языке у будущих учителей английского языка как иностранного посредством голосового чат-бота Voice Chatbot на основе ИИ с использованием платформы SmallTalk2Me: компонент развития цифровой грамотности**

В данной статье исследуется повышение беглости разговорной речи на английском языке с помощью чат-бота на основе искусственного интеллекта как компонента развития цифровой грамотности. Цель исследования — определить эффективность использования чат-бота SmallTalk2Me на уроках у будущих преподавателей английского языка для иностранных студентов. В исследовании используется смешанный метод, включающий интервью, опросы и анализ результатов обучения студентов. Эксперимент проводился в двух группах. Экспериментальная группа использовала чат-бот SmallTalk2Me на уроках, а контрольная группа работала традиционным способом. Результаты показали, что экспериментальная группа имела более высокий уровень мотивации к обучению, чем контрольная группа. Беглость разговорной речи студентов оценивалась по трем основным критериям: темп речи, логическая связность и лексическое разнообразие. Все три показателя были значительно выше в экспериментальной группе, чем в контрольной. Результаты показывают, что платформа SmallTalk2Me на основе искусственного интеллекта значительно способствует повышению беглости разговорной речи, мотивации и вовлеченности учащихся в процесс. Согласно результатам, чат-боты на основе искусственного интеллекта следует включать в программы подготовки преподавателей английского языка.

*Ключевые слова:* цифровая грамотность, SmallTalk2Me, учителя английского как иностранного языка, учебная программа по английскому языку, тревога при изучении иностранного языка, использование игровых элементов, инициированные беседы, беглость устной речи на английском языке, фонетическая точность.

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