

поведения, включая ранние признаки буллинга. Эмоционально компетентный педагог способен гибко реагировать на конфликтные ситуации, предотвращать их обострение и создавать условия для психологической безопасности учащихся. Результаты проведенного исследования показывают, что у большинства будущих педагогов указанные качества находятся на достаточно высоком уровне, что открывает возможности для формирования безконфликтной образовательной среды в школе.

Значимость умения распознавать и интерпретировать эмоциональные состояния проявляется, в частности, в способности педагога выявлять аутсайдеров среди учащихся, что способствует формированию благоприятного социально-психологического климата в классе. Полученные в ходе исследования данные указывают на необходимость целенаправленного развития данного компонента эмоционального интеллекта. Кроме того, способность будущих педагогов к эффективному управлению собственным эмоциональным состоянием рассматривается как одно из ключевых профессионально значимых качеств личности, отражающих уровень их профессиональной компетентности. Сформированность данного умения обеспечивает устойчивость к стрессовым воздействиям, характерным для педагогической деятельности и создает основу для применения конструктивных копинг-стратегий. Результаты исследования демонстрируют, что у большинства испытуемых данный компонент эмоционального интеллекта находится на достаточном уровне развития.

На основании вышеизложенного, эмоциональный интеллект следует рассматривать как один из ключевых ресурсов профессиональной деятельности современного педагога. Его высокий уровень способствует установлению продуктивных межличностных отношений с обучающимися, родителями и педагогами, а также предупреждению неблагоприятных ситуаций в образовательной среде за счёт внимательного отношения к эмоционально-чувственной сфере учащихся. Кроме того, высокий уровень эмоционального интеллекта обеспечивает устойчивость к стрессовым воздействиям, способствует эффективному взаимодействию в сложных педагогических ситуациях и повышает общий уровень личностного и профессионального благополучия. Результаты проведенного исследования подтверждают актуальность и необходимость целенаправленного развития эмоционального интеллекта в системе подготовки будущих педагогов.

Практическая значимость исследования заключается в возможности применения его результатов в психологическом консультировании, обучающих программах и тренингах, направленных на развитие эмоционального интеллекта у будущих педагогов.

Список использованной литературы

1. Кинг С. Кэрри / пер. с англ. А. И. Корженевского. – М.: АСТ, 1997. – 45 с.
2. Министерство просвещения Республики Казахстан. Об утверждении профессиональных стандартов для педагогов организаций образования: приказ от 24.02.2025 № 31. – Электронный ресурс. – Режим доступа: <https://adilet.zan.kz/rus/docs/G25HP000031>
3. Наймушина, Л. М. (2020). История становления понятия «эмоциональный интеллект» в психологической науке. Педагогика: история, перспективы, 3(4), 63–70. <https://doi.org/10.17748/2686-9969-2020-3-4-63-70>
4. Андреева И. Н. Эмоциональный интеллект: исследования феномена / И. Н. Андреева // Вопросы психологии. – 2006. – № 3. – С. 78-87.
5. Люсин Д. В. Современные представления об эмоциональном интеллекте / Д.В. Люсин // Социальный интеллект: Теория, измерение, исследования. Сер. Труды Института психологии РАН Институт психологии РАН; под редакцией Д. В. Люсина, Д. В. Ушакова. – Москва, – 2004. – С. 29-36
6. Гоулман Д. Эмоциональный интеллект. Почему он может значить больше, чем IQ / Дэниел Гоулман; пер. с англ. А. П. Исаевой; науч. ред. Е. Ефимова. — 11-е изд., перераб. и доп. — Москва: Манн, Иванов и Фербер, 2021. — 544 с.
7. Андреева И. Н. Азбука эмоционального интеллекта. – СПб.: БХВ-Петербург, 2012. – 288 с.
8. Люсин Д. В. Новая методика для измерения эмоционального интеллекта: опросник ЭМИн // Психологическая диагностика. - 20067 № 4 С. 3–22.
9. Мунбаева А., Гумерова А. Развитие эмоционального интеллекта средствами арт-терапии // Вестник КазНУ. Серия педагогическая. – 2017. – Т. 51. – №. 2. – С. 36-48.
10. Sardařova Z. et al. Эмоциональный интеллект как основной показатель готовности современных педагогов к профессиональной деятельности в условиях цифровизации и инклюзивного образования // Вестник КазНУ. Серия «Педагогические науки». – 2021. – Т. 67. – №. 2. – С. 28-37. <https://doi.org/10.26577/JES.2021.v67.i2.04>

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ARTIFICIAL INTELIGENCE IN LANGUAGE LEARNING: CHATBOTS FOR ORAL COMMUNICATION DEVELOPMENT

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This article focuses on how English students in Pre-Intermediate (Regarded Class) can improve their speaking skills through the use of AI-powered chatbots -- including a full analysis of the e-system at work in New Crown Technical College. The importance of this research lies in two aspects: the limited opportunities for conversation in technical fields, and how this can be partly remedied by new methods and old practices to meet

individual learning needs, as onwards development of AI technology. The study includes a review of traditional methods of teaching speaking and the use of AI in educational settings as well as a review of examples where digital pedagogies tool implementation results from these theories. The benefits AI chatbots can bring should not be overlooked, including personalized learning experiences that are available around the clock and relieve anxiety levels for engineering and technical student-admissions applicants. The article offers specific examples of how this technology may be smoothly integrated into educational practices and gives practical methods for making effective use of chatbots in learning both within the classroom and outside it by students themselves. The results of the research indicated that incorporation of AI chatbots can compensate for the limited practice in speaking, increase students' methods, and promote fluent communication skills for individuals. The research paper especially emphasizes the importance of AI technology in creating an environment that encourages and improves the spoken ability of English students with little exposure to or opportunity for communication.

Keywords: artificial intelligence, chatbot, English language, Pre-Intermediate, speaking, digital pedagogy.

A prominent characteristic of modern education is the increasing integration of technology. This trend, which may be seen as a great help in customizing educational processes to individual requirements, also marks an improvement over the traditional system of instruction. AI-powered chatbots are one such innovative device, providing students with real-time interaction through computer programs. Their advantages find special applications in the acquisition of foreign languages: here we need persuasion, not pictures. The originality of this study is it fully uses chatbots based on AI technology to foster speaking skills among University Pre-Intermediate students. The present study takes into account current psychopedagogical and affiliated teaching principles to stimulate speaking proficiency at knife-point. Engagement with AI bots, unlike desire, the development of speaking practice in these other modern times or traditional recorded classes, saves both students and educational time. A significant innovation of this technology is chatbot instant feedback, which goes beyond simple identification errors into a range of varied explanations tailored to linguistic ability. This technology provides students with error correction for speaking. It takes into account cognitive and emotional characteristics of students. From this perspective, chatbots are a versatile educational tool that partially replaces traditional tutoring or classroom learning activities without sacrificing the educational benefits to students. Another significant advantage of chatbots is that they allow for systematic out-of-class practice with professional support in language use—an undertaking that previously required incredible amounts of time and resources. Also, this research utilizes students' dependency on digital technologies (such as smartphones and messaging apps) as an impelling factor. Chatbots are in line with students' familiar digital landscape, seamlessly placing into their daily lives fresh, engaging, and vibrant conversations in English. It is worth noting that when students interact with chatbots, they feel less embarrassed about making mistakes and are less intimidated by the possibility of being criticized; thus, their language confidence goes up and frequency of speaking goes up. In this way, such a new model thus holds promise as it represents an ideal method of making speaking energy across all psychological, pedagogical, technological, and methodological requirements. For this study, I assess the pedagogical significance of AI chatbots in the development of speaking skills among Pre-Intermediate level students [1].

Materials and Methods

This research adopted a comprehensive methodology for evaluating the efficacy of AI chatbots in improving speaking skills among Pre-Intermediate level students from Abylka Saginov Karaganda Technical University. The aim of this study is to determine the pedagogical value and practical significance of AI chatbots as an innovative resource to enhance communicative competence for college students. This study falls into the category of linguoteaching research, which seeks to improve foreign language teaching methods with the aid of modern digital technology. In particular, we need to keep in mind special features of technical universities, such as the lack of speaking practice or the syndrome of communicative anxiety among students. In order to achieve the objectives of the study, an array of scientific and educational approaches were taken:

- **Theoretical analysis and systematization:** The study analyzed theoretical principles in teaching speaking from a modern linguodidactic perspective. It placed emphasis on communicating and interacting with people, looking at psycholinguistic factors that come into play when students try to talk.

- **Literature review and analysis:** AI chatbots in educational settings have been reported in academic research both at home and abroad. Research in personalized learning, adaptation systems, and feedback technologies was then examined.

- **Practical experience analysis:** This addressed two aspects, integrating AI chatbots like Eliza and Parry into genuine teaching situations and using them as companions for actual courses of instruction. Furthermore, it investigated platforms such as DialogGPT (OpenAI), Replika AI, and Character AI for their potential to boost speaking ability.

- **Pilot study and data collection:** A pilot study was carried out on 38 technical university students over four weeks, during which AI chatbots were utilized for English language learning. Its effectiveness was evaluated through a comparison between the speaking skills of experimental and control groups, supplemented by students' qualitative feedback.

In practice, the main instruments for implementing the experiment were as follows:

- **AI-based chatbots:** Widely-used dialogue systems capable of giving feedback to users and adjusting their level of difficulty (e.g., ChatGPT, Replika, DuolingoMax, etc. as referred to in the text)[2].

- **Voice interfaces:** Used to teach pronunciation and encourage spontaneous speech.

- **Learning materials:** Adopted into interactive tasks linked with chatbots (e.g., role-play dialogues for lower intermediate students; chat about everyday topics). Interactions include:
 - **Role-play dialogues:** The robot and students engaged in conversation about set topic items, such as travel.
 - **Shopping.**
 - **Introduction.**
 - **Pronunciation training:** Voice-enabled functions will use.
 - **Open speaking development:** Free-talking questions students to articulate their thoughts and with the machine them.

Results and Discussion

The growing trend currently taking hold in Kazakhstan, where AI is incorporated into English language learning, underscores the significance of this topic. A systematic review of foreign scientific literature has been indexed on the Web of Science platform, and this will be rendered in detail in the References section. An example of this can be found in a notable study titled "New Modes for Creating a Free, Safe, Proprietary Language Learning Environment by AI Especially Chatbots," that was conducted jointly by Lucía M. Gutiérrez and others (2013) [3].

One thing working in their favor underlines is that chatbots can eliminate student fear of speaking or impede oral communication entirely, while allowing them to practice freely and individually outside of class situations as well (supported by contemporary evidence). Gutiérrez points out, however, this may be English ChatGPTs are still in their formative stages, relatively anyway. Chatbots at present are moving into their fourth generation as language designs and lack the capability for dealing with non-recreational, let alone arduous chores such as: answering complex questions posed in English or question sets requiring specific cultural knowledge to interpret and handle effectively proper geographical terms for places on earth. Compounding this is the fact that it remains to be settled how accurate this kind of information is, what its cultural slants entail, and lastly what rights ethically one inherits by employing these technologies. Consequently, it is central to successful, just, and practical integration of AI into educational settings that both teachers as well as learners become digitally literate [4].

A second study, "Unleashing the Potential of Chatbots in Education-A Landscape Concept of Literature," by Winkler and Söllner (2018) has methodological significance because it systematically reviews 1,405 full scientific publications concerning educational chatbots on an international basis, resulting in a comprehensive analysis affecting 80 of the most important studies. Though they admit that presently chatbots in education are just embryonic, they argue this form of AI has great potential to improve learning outcomes and bring personalized education to more people. Their research contains three main ideas: chatbots, technology-mediated learning, and (TML) output quality. Chatbots are human simulation through text or speech (such as Alexa, Google Home, ChatGPT). They can be classified by function like information retrieval or generative and by input method text versus oral -- and how deeply tuned into what is happening around them. Learning outcomes associated with chatbot interaction typically fall into four categories:

- Cognitive, i.e., knowledge and cognitive ability
- Affective, which includes motivation and interest, emotions
- Psychomotor skills

Furthermore, the development of metacognitive abilities is supported by chatbots' provision of feedback and self-regulation processes. The theoretical model of CML/TML proposed by the authors consists of three parts: input parameters (technology and organization), interaction process, and expected learning outcomes. Factors related to the effectiveness of chatbot-based learning include individual characteristics of students (e.g., attitudes towards technology, self-efficacy levels, emotional states), erudition setting (e.g., different areas of medicine or language learning), chatbot design and functionality (e.g., scenarios, AI, speech input, background knowledge), and how deeply integrated it is into the instructional environment (LMS systems vs. messaging tools). If chatbots are well designed and made to operate effectively, they can hopefully significantly improve learning outcomes in the cognitive, developmental, and metacognitive domains. This could be especially important for large classes without time for some kind of individual instruction; or scenarios where independent learning is necessary.

In addition, Beysembayeva A.B. (2025) contributes valuable local context to the scene in Kazakhstan. Among other things, the research she is engaged in looks at systems architecture (application fields of AI) used to tutor English across Kazakhstan. This includes conducting surveys among teachers and students, interviewing methods consultants and people in IT, and analyzing such platforms as ChatGPT, Grammarly, ELSA Speak, BilimLand, and Daryn.Online[4].

Another relevant study, "Integration of Chatbots into Foreign Language Teaching" by Khamza M.A. and Zagidullina A.A. (2025), published in the Vestnik journal of Ablai Khan KazUIR&WL, explores the effective deployment of chatbots, particularly ChatGPT and Duolingo Super, in foreign language instruction at Kazakhstani universities. Combining theoretical analysis, a survey (n=134 teachers and n=237 students), and experimental trials with B1-level students, the authors identified positive developments in language competence. According to the findings, 82% of teachers and 78% of students acknowledged that chatbot use enhanced learning motivation. Experimental group students exhibited notable progress in both oral and written communication skills, as well as increased class participation [5].

The purpose of the experiment was to determine the dynamics of changes in students' dialogic and monologic speaking activity, their level of language confidence, and their attitudes toward independent communication practice with an AI partner. The research hypothesis was as follows: the use of AI chatbots in the learning process significantly improves oral

proficiency of Pre-Intermediate students, reduces communicative anxiety, and increases language activity, making it more effective compared to traditional teaching methods. To test this hypothesis, a pilot quasi-experimental study was conducted.

The study involved first-year engineering students at Abylkas Saginov Karaganda Technical University. A total of 38 students were randomly divided into two groups:

- Experimental group (n=20): students who regularly practiced oral communication with AI chatbots such as ChatGPT, Replika AI, and voice modules;
- Control group (n=18): students who followed the traditional curriculum without the use of AI tools.

The methodology of the experiment included several stages aimed at identifying the impact of using AI chatbots on the oral communication skills of Pre-Intermediate level students:

1. Pre-test (diagnostics of initial level):
 - Assessment of oral communication level (based on criteria of fluency, accuracy, and activeness in dialogue);
 - Evaluation of communicative anxiety (adapted version of the Foreign Language Classroom Anxiety Scale – FLCAS);
 - Lexical-grammatical test designed for Pre-Intermediate level.
2. Four-week intervention phase:
 - The experimental group interacted with AI chatbots three times a week for 30–40 minutes each. The sessions included role-play dialogues, voice training, and spontaneous speech development tasks.
 - The control group completed thematically similar tasks, but only through traditional oral exercises (pair work, dialogues, textbook activities, and classroom discussions).
3. Post-test:
 - Both groups took a final test structured similarly to the pre-test.

Assessment tools:

- FLCAS scale (Horwitz et al., 1986) – adapted version was used for diagnosing communicative anxiety;
- Criteria for assessing oral communication skills, adapted from CEFR (Common European Framework of Reference for Languages):
 - Fluency
 - Accuracy
 - Pronunciation
 - Initiative
 - Statistical data processing:
 - Comparative analysis methods were applied (Student’s t-test for independent samples);
 - Correlation analysis was conducted to identify the relationship between chatbot interaction frequency and improvement in language indicators.

Table 1- presents the quantitative results of the experiment, illustrating the dynamics of changes in key indicators for both groups.

Indicator	Experimental Group (Pre Post)	Change	Control Group (Pre Post)	Change
Fluency (speech rate)	baseline → +25	+25	baseline → +6	+6
Accuracy	baseline → +18	+18	baseline → +5	+5
Communicative anxiety (FLCAS)	baseline → -21	-21	baseline → -4	-4
Number of speech acts	baseline → +14	+14	baseline → +2	+2

- In the experimental group, statistically significant improvements were observed across all major indicators:
 - The number of speech acts in dialogues increased by 32% (p<0.05);
 - Speech rate increased by 25%, and accuracy improved by 18% (p<0.05);
 - According to the FLCAS scale, the level of communicative anxiety decreased by an average of 21 points (p<0.01).
- In the control group, the changes were less pronounced and, for most indicators, were not statistically significant, with only a slight improvement in accuracy observed.
 - Qualitative analysis of the experimental group students’ feedback indicated a positive attitude toward working with chatbots:
 - 85% of respondents reported increased confidence in speaking,
 - 78% noted improvement in pronunciation,
 - 90% expressed readiness to use chatbots for independent learning in the future.

The results demonstrated a 25% improvement in speaking fluency, an 18% increase in accuracy, and a 21-point decrease in communication anxiety according to the FLCAS scale among the experimental group participants. The number

of speech acts increased by 32%, which reflected the enhancement of linguistic activity and confidence in communication. In contrast, the control group showed only slight improvements that were not statistically significant.

Thus, the integration of AI chatbots not only compensated for the lack of speaking practice but also fostered the development of communicative competence by creating a flexible, personalized, and convenient language environment. Additionally, students demonstrated higher motivation and a positive emotional response to independent work with AI tools.

The findings suggest that incorporating AI chatbots into the educational process of technical universities can be regarded as a promising direction of digital pedagogy in conditions of limited direct language interaction. However, successful implementation requires a comprehensive approach that combines technical, methodological, and psycho-pedagogical readiness. Future research should expand the scope of experiments, include students with varying levels of language proficiency, and explore the long-term effects of using AI chatbots in language learning.

In another study of the same sort titled "Integration of Chatbots into Foreign Language Teaching" published by Khamza M.A. and Zagidullina A.A. in 2025 in the Vestnik journal of Ablai Khan KazUIR&WL, the effective use of chatbots (especially those such as ChatGPT and Duolingo Super) is considered in foreign language education at universities in Kazakhstan.

The authors combined theoretical analysis, a survey (n=134 teachers and n=237 students), and experimental trials with B1-level students to look at what this yielded in language competency. The study found that 82% of teachers and 78% of students agreed chatbot use motivated learning. The experimental group students showed significant progress in oral communication skills and written communication abilities, as well as increased classroom participation.

The authors also maintain that chatbots greatly contribute to personalized learning, learner autonomy, and improved language education quality, while stressing the need for further research on methodological and technological developments. The authors say that chatbots in this way significantly contribute to personalized learning, learner autonomy, and improvements in language training quality while the article also emphasizes the need for further research to overcome methodological and technological challenges.

Taking all main indicators into account, it was observed with statistical significance that in the experimental group speech-act numbers improved. Page 127 standard speech acts increased by 32% in dialog (p <0.05). Speed of speech increased by 25%, and accuracy by 18% (p <0.05). Altogether, the FLCAS average point of communication apprehension dropped 21 points (p <0.01) for our experimental group.

One point worth particular mention is that in the control group there were fewer and less obvious changes than might be expected of their speech patterns; nearly all criteria did not achieve statistical significance, plus only a slight increase in accuracy could be elicited.

Qualitative analysis of the feedback given by the experimental group students showed that they were generally of a positive mindset towards chatbots: 85% reported increased confidence in speaking; 78% stated pronunciation was better; 90% declared a willingness to learn independently using AI tools in future studies.

The results indicate that the experimental group participants got a 25% increase in speaking fluency, an increase of 18% for their accuracy, and 21 points less communication anxiety (FLCAS scale). The number of speech acts increased by 32%, which reflected an increase in language activity and greater confidence to talk. On the other hand, the control group only had slight improvements that were not significant statistically compared with its condition earlier on.

So not only could AI chatbots make up for the lack of speaking practice, but they could help in the development of communicative competence by adjusting their form and placement to be more flexible, personalized, and convenient for life. Furthermore, students showed a stronger motivation to learn and a better mood for their own work under this new situation.

The findings hereby propose that in a time when language is not spoken directly on the job, introducing AI chatbots into the educational process of technical universities might indeed be seen as one promising direction for digital pedagogy. Yet there are some things to keep in mind for successful implementation: firstly, we need to plan ahead technically, methodologically, and psycho-pedagogically. Future research directions include diversifying the range of experiments, taking students with different levels of language ability as subjects for tests, and finding out the long-term effect on language learning of using AI chatbots.

References

1. Winkler R., Söllner M. Unleashing the Potential of Chatbots in Education: A State-Of-The-Art Analysis // Academy of Management Proceedings. – 2018.
2. Gutiérrez L. Artificial Intelligence in Language Education: Navigating the Potential and Challenges of Chatbots and NLP // Research Studies in English Language Teaching and Learning. – 2023. – Т. 1, №3. – С. 180–191. – DOI: <https://doi.org/10.62583/rseltl.v1i3.44>.
3. Бейсембаева А.Б. Искусственный интеллект в обучении английскому языку в Казахстане: возможности и перспективы // Вестник ЖУ. – 2025. – №1(114). – С. 60–65. – DOI: <https://doi.org/10.53355/ZHU.2025.114.1.007>.
4. Хамза М.А., Загидуллина А.А. Интеграция чат-ботов в иноязычное образование // Известия КазУМОиМЯ имени Абылай хана. Серия «Педагогические науки». – 2025. – №1(76). – С. 42–57. – DOI: <https://doi.org/10.48371/PEDS.2025.76.1.003>.
5. Tegos S., Demetriadi S., Papadopoulos P.M., Weinberger A. Conversational agents for academically productive talk: a comparison of directed and undirected agent interventions // International Journal of Computer-Supported Collaborative Learning. – 2016. – Т. 11, №4. – С. 417–440. – DOI: 10.1007/s11412-016-9246-2.