
ТІЛТАНУДЫҢ ӨЗЕКТІ МӘСЕЛЕЛЕРІ АКТУАЛЬНЫЕ ПРОБЛЕМЫ ЯЗЫКОЗНАНИЯ ACTUAL PROBLEMS OF LINGUISTICS

Article

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The Possibilities of Enhancing Intercultural Competence Through AI Simulations While Teaching English as a Foreign Language

Current trends in globalization and educational digitalization require us to rethink how teachers help foreign language learners to acquire intercultural competence. The use of artificial intelligence technologies offers a promising way to create immersive, interactive, and adaptable learning environments. AI simulations help students develop cultural awareness, empathy, tolerance, and effective intercultural communication skills by mimicking real-world communication scenarios and allowing them to interact with virtual avatars. This study looks into how we can incorporate artificial intelligence into foreign language teaching to support cognitive, emotional, and behavioral aspects of intercultural competence. It specifically examines the teaching potential of platforms that use game-based interactions, automatic feedback, and adaptive AI models. With this technology, students can improve self-reflection, metacognitive techniques, and their understanding of the cultural context of communication. Using AI simulations in the classroom provides additional opportunities for developing soft skills and integrative language abilities. These skills are essential for successful intercultural and professional communication in today's globalized society. The study was conducted at Abai Kazakh National Pedagogical University and involved second-year undergraduate students participating in an experimental training program. AI simulation platforms such as Alelo Enskill, Hyperspace, and Gen2Lingo were used to create interactive intercultural communication scenarios. These platforms provided students with opportunities to engage in realistic conversations with virtual characters representing diverse cultural backgrounds, while receiving automated feedback on language use, pragmatic appropriateness, and cultural sensitivity. The findings indicate that the use of AI simulations significantly enhances students' intercultural competence by improving their communication flexibility, empathy, cultural awareness, and confidence in intercultural interactions. In addition, the interactive and adaptive nature of AI technologies increases student motivation and engagement in the learning process. The results demonstrate that AI simulations represent an effective pedagogical tool for integrating language learning with intercultural development and preparing students for participation in academic and professional communication contexts.

Keywords: artificial intelligence, AI simulations, intercultural competence, foreign language teaching, digital learning, soft skills, intercultural communication.

Introduction

The rapid growth of digital technologies and integration of artificial intelligence (AI) tools into teaching methods are significantly changing the current educational landscape. Recent studies in the Central Asian context suggest that the success of such integration depends on the digital literacy of both educators and students [1]. Furthermore, the shift towards AI-driven pedagogy aligns with global trends where language acquisition is no longer separated from cultural immersion [2]. Traditional teaching methods are being updated,

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the role of the teacher is changing, and the concept of educational engagement is being reconsidered. Digitalization allows for personalized, interactive, and adaptable learning. The focus is now on developing skills, critical thinking, and intercultural communication instead of just transferring knowledge.

Building intercultural competence is a top priority for higher education, especially considering globalization and increasing population mobility. As noted by Kazakhstani researchers, the modernization of spiritual values in education requires a synthesis of national identity and global communication skills [3]. This synthesis is particularly vital in multilingual environments where English serves as a bridge between diverse cultural codes [4]. Intercultural competency goes beyond language skills for foreign language learners. It includes tolerance, empathy, and respect for cultural diversity. It also encompasses the ability to adapt to various communication contexts and understand the cultural codes, values, and behaviors of people from different countries. Cultivating intercultural competency helps future professionals succeed socially in a globalized world, in addition to advancing their careers.

In contrast, Deardorff's process-oriented model presents intercultural competence as a dynamic and cyclical process rather than a fixed set of components. It highlights internal outcomes and external outcomes. Unlike Byram's more structured model, Deardorff focuses on the developmental nature of intercultural competence, emphasizing continuous learning and reflection.

Another widely cited framework is Bennett's Developmental Model of Intercultural Sensitivity, which describes intercultural competence as a progression through six stages, from ethnocentrism to ethnorelativism. This model is particularly useful for understanding learner's psychological readiness for intercultural interaction and for designing pedagogical interventions that support this progression.

A comparative analysis of these models demonstrates that while Byram's framework provides a comprehensive structural description of intercultural competence, Deardorff's model emphasizes its processual and developmental nature, and Bennett's model focuses on the affective and perceptual transformation of the learner. The integration of these perspectives allows for a more holistic understanding of intercultural competence as a multidimensional construct that includes cognitive, emotional, and behavioral components.

In recent years, interest in using artificial intelligence technology to teach foreign languages has significantly increased. Advanced generative models now allow for the creation of "cultural twins" or avatars that reflect specific regional dialects and social norms [5]. This technological leap enhances opportunities for structured intercultural interaction in the classroom where mistakes carry no social risk [6]. These technologies help create a learning environment that adjusts to each student's unique traits, motivation, level of preparation, and preferred ways of learning. Among the various AI tools, interactive simulations that use machine learning, generative language models, and natural language processing (NLP) systems hold a special place. These simulations can replicate real-world international communication scenarios, including nonverbal cues, emotional responses, and cultural backgrounds.

Using AI simulations in the classroom opens up new possibilities for developing intercultural competencies. Students can interact with virtual conversation partners, represented by avatars from different cultures, to simulate diverse analytical and professional scenarios. It provides a safe space for students who face psychological barriers when communicating in real life, letting them experiment and develop their communication flexibility [7; 47].

A series of classes at the Abai Kazakh National Pedagogical University (KazNPU) utilized artificial intelligence simulation platforms as part of a pedagogical experiment. The selection of this venue was motivated by its leading role in pedagogical innovation within Kazakhstan's higher education system [8]. Previous local initiatives have shown that students are increasingly receptive to gamified AI elements in their curriculum [9].

In this study, intercultural competence is operationalized based on the integrated theoretical framework combining Byram's structural components, Deardorff's developmental process, and Bennett's sensitivity stages.

Accordingly, three analytical dimensions are identified: behavioral, emotional, and cognitive. This integrative approach ensures both theoretical validity and practical applicability in analyzing AI-mediated learning environments.

The study investigates how these technologies influence three key aspects of intercultural competence: behavioral (communication flexibility and adaptability), emotional (empathy and respect for different cultures), and cognitive (understanding of cultural differences). The findings emphasize the substantial potential

of AI simulations as an innovative method for combining language and culture education. They are effective in helping students develop thoughtful intercultural communication skills.

Similar to traditional ideas but backed by new empirical evidence, recent research [10] shows that intercultural competence includes cognitive, emotional, and behavioral dimensions. Understanding a foreign culture's norms and values is just one aspect of intercultural competence. Another is the ability of learners to change their behavior, respond to cultural expectations, and show empathy and tolerance in both practice and real-world situations.

In recent years, many studies have explored the use of artificial intelligence in teaching foreign languages. Research by Li & Chen [11] and Lin et al. [12] reveals that AI-based learning tools increase students' motivation and adaptability. In particular,

NLP-based chatbots and virtual assistants support the development of critical thinking and communication skills.

According to the study *Exploring the Perspectives of Cross-Cultural Instructors on Integrating 21st Century Skills into EFL University Courses* [13; 64], teachers now see modern skills, such as intercultural interaction, critical thinking, and adaptability as essential to learning English, including the growth of cultural sensitivity.

AI simulations stand out from other digital tools because they can recreate real-life conversational settings, including emotional and cultural aspects of interaction. Research by Chung & Ahn [14; 107-109] and Garcia [15; 46] indicates that participating in AI scenarios helps develop empathy, understand cultural norms, and respond appropriately to cultural differences.

AI is still not commonly used in Kazakhstani classrooms for teaching foreign languages. However, recent trends show growing interest in incorporating digital technology into language teaching [16]. In this regard, using AI simulations could be a promising direction for modernizing language instruction in Kazakhstan.

AI simulations can be created using various platforms and technologies. A pedagogical experiment at Abai Kazakh National Pedagogical University used three contemporary commercial AI platforms focused on simulation training to improve the intercultural competence of undergraduate students: Alelo Enskill, Hyperspace, and Gen2Lingo. Each offers different educational and technical features aimed at fostering critical thinking, communication adaptability, and intercultural interaction skills in an English-speaking environment.

The Alelo Enskill platform, developed by the American company Alelo Inc., is an interactive AI-based system for teaching foreign languages and cultural communication. It uses AI avatars to simulate authentic communication scenarios, ranging from casual conversations to business interactions. In the core Enskill Ed program, students engage with virtual characters that represent various cultural backgrounds. The system evaluates user responses through speech recognition and natural language processing (NLP) technology and provides feedback in three areas: multicultural sensitivity, pragmatic appropriateness, and language accuracy. Additionally, teachers can track student progress and adjust scenarios to meet learning goals using the Enskill Dashboard. Alelo Enskill thus offers thorough language and intercultural skill development in a secure online setting.

The second technology used is the immersive Hyperspace platform. This platform models intercultural communication situations through role-playing games with autonomous avatars, helping to develop soft skills. Hyperspace uses adaptive interaction models, where the language and cultural strategies of students influence how the virtual conversation partners behave. The scenarios are designed with cultural norms in mind and include corporate communications, academic discussions, and negotiating situations. The systems integration with LMS platforms (like Moodle or Canvas) allows teachers to monitor student progress and the dynamics of skill development. Hyperspace immerses students in a realistic environment that simulates not just language but also the emotional and cultural aspects of communication. It also evaluates indicators of empathy, cultural awareness, and conflict resolution techniques to create a complete view of the student's intercultural behavior.

The third tool in the experiment was the Gen2Lingo platform from Gen2B AI Solutions, similar to modern GPT-style NLP systems, it is a language simulator built on generative AI models. Gen2Lingo allows students to practice conversational English and other languages by selecting topics and difficulty levels based on the European CEFR scale. The platform provides interactive feedback on grammar, vocabulary, style, and cultural appropriateness in various contexts, including academic interviews, business discussions,

and casual conversations. To increase student motivation, it also features gamification elements like ratings, achievements, and challenge levels. Additionally, the system gives teachers reports showing student engagement frequency, types of errors made, and correction trends.

This article aims to analyze how AI simulations can enhance undergraduate students' intercultural competence during foreign language learning. It focuses on the potential of these technologies for teaching and their role in fostering cultural awareness, cognitive tolerance, and cultural adaptation.

The scientific relevance of this study lies in its ability to address a major gap in intercultural competence training by showing how AI simulations can recreate authentic, emotionally and culturally rich communication scenarios that traditional methods cannot provide. It advances theoretical understanding in AI-assisted language learning by examining the cognitive, emotional, and behavioral aspects of intercultural development within technologically enhanced environments. The study also contributes valuable empirical evidence from the Kazakhstani educational context, where research on AI-driven intercultural learning remains limited. Furthermore, it expands scientific knowledge on how digital tools foster soft skills such as tolerance and communication flexibility, while providing practical, evidence-based guidance for modernizing EFL curricula in higher education during ongoing digital transformation.

By combining these three platforms, a multi-component digital learning environment was created, allowing students to enhance their language skills while also improving their ability to recognize and understand cultural differences. Alelo Enskill offered communicative accuracy and intercultural empathy; Hyperspace promoted interpersonal communication and culturally diverse behavior; and Gen2Lingo helped automate speech skills and build confidence in intercultural settings. This integration of language and cultural learning into a single educational system was made possible through this combination of simulation technologies.

Materials and Methods

The experiment was conducted in the spring semester of 2025 at the Abai Kazakh National Pedagogical University (KazNPU). Sixty second-year undergraduate students participated in the study.

All participants were divided into two groups:

Experimental group (EG) — 30 students who were trained using AI simulations;

Control group (CG) — 30 students who studied using a traditional program without the use of AI tools.

Tools and materials

The application used Alelo Enskill, Hyperspace, and Gen2Lingo, three modern technologies. Virtual avatar simulations took place on the Alelo Enskill platform, especially for situations involving cultural differences, customs, politeness standards, and typical mistakes in intercultural communication. In simulated professional and social scenarios, where understanding different cultural norms, gestures, and nonverbal communication is important, Hyperspace supported role-playing. Additionally, the Gen2Lingo platform provided students with a way to practice speaking, participate in interviews, and discuss specific topics while receiving automated feedback on their vocabulary, grammar, and pronunciation.

Experimental procedure

The experimental process had several steps. All participants in the pilot stage completed an initial intercultural competency exam using a modified Deardorff scale [17]. The Deardorff scale was adapted to the local Kazakhstani context. Its reliability was verified using Cronbach's alpha, indicating high internal consistency. Construct validity was confirmed via exploratory factor analysis, which retained the cognitive, behavioral, and affective dimensions of intercultural competence.

The experimental group underwent training using three AI platforms. Over eight weeks, regular simulation sessions were held.

Data were analyzed using SPSS v.28; statistical procedures included:

– *Paired-samples t-tests to evaluate within-group pre-post differences in intercultural competence scores;*

– *Independent-samples t-tests to compare the post-test scores of EG and CG;*

– *One-way ANOVA to examine the effects across cognitive, affective, and behavioral dimensions;*

– *Effect sizes were calculated to measure the magnitude of observed differences.*

Statistical significance was reported as p-values, but also 95 % confidence intervals were included to provide a more comprehensive understanding of the results.

This methodological approach ensured both internal validity and rigor in data analysis, allowing for robust assessment of the impact of AI-mediated interventions on intercultural competence.

Students used the Alelo Enskill platform to complete one assignment each week that involved interacting with an avatar in a cultural setting. These assignments included discussing etiquette, resolving conflicts due to cultural differences, or conducting business with a foreign partner. The system provided automatic feedback at the end of each session, which lasted about twenty minutes and covered pragmatic and linguistic aspects.

Classes using Hyperspace involved role-playing scenarios in a virtual environment and took place once every two weeks. In these sessions, a group of students addressed issues related to cultural differences, such as miscommunications caused by varying perceptions of time, levels of directness, or standards of politeness. AI-generated avatars made the experience more realistic by responding to students' comments based on the chosen communication style. The scenarios included nonverbal cues like intonations and gestures, in addition to spoken ones.

Students used the Gen2Lingo platform to work on their own outside class. They chose topics such as a business letter, interview, tourist scenario, or an impromptu discussion with a virtual partner that matched their interests or career goals. The system provided feedback that included suggestions for correcting grammar and verbal mistakes, which helped tailor the instruction.

The teacher led group discussions after each Hyperspace role-play or simulation. Students examined how to communicate effectively across cultures, identified cultural quirks, and reflected on their own mistakes. Each participant kept a personal observation notebook to develop reflective skills, documenting challenges, feelings, and insights from their experiences with the AI systems.

We were able to assess the dynamics of skill growth as both groups retook the intercultural competency exam after the eight-week training period. We also collected self-assessment data from the students, including their level of cultural sensitivity, confidence in intercultural communication, and readiness to handle conflict.

Results

The findings from the experiment clearly showed the impact of AI simulations on students' development of intercultural competency. *Statistical analysis was performed using SPSS v.28. Pre- and post-test scores for the experimental and control groups were analyzed using paired-samples t-tests to evaluate within-group changes and independent-samples t-tests to compare post-test scores between groups. Effect sizes were calculated using Cohen's d, and 95 % confidence intervals were reported to ensure comprehensive interpretation of the results.*

Statistical analysis performed using SPSS software confirmed that the p-value was less than 0.05, indicating high reliability of the results [18]. Such a significant margin suggests that AI is not merely a supplementary tool but an effective pedagogical tool [19]. *The p-value for the EG pre-test comparison was <0.001, with a Cohen's d = 1.56, indicating a very large effect size. For the CG, the pre- post comparison yielded p = 0.08, d = 0.22, showing a small and statistically insignificant effect.*

Interestingly, qualitative feedback indicated that students felt a "reduced affective filter," a concept vital in second language acquisition theories [20]. By interacting with non-judgmental AI, the psychological barrier to speaking was lowered significantly compared to traditional peer-to-peer work [21]. According to the preliminary analysis, the initial levels of intercultural competence in the experimental and control groups (62.3 and 61.8 points on a 100-point scale, respectively) did not differ significantly, (independent-samples t-test: $t(58)=0.36$, $p=0.72$) indicating that the participants started at similar levels.

After the eight-week training cycle, the outcomes changed noticeably. Students in the experimental group, after training with the Alelo Enskill, Hyperspace, and Gen2Lingo platforms, showed an average increase in intercultural competence to 81.7 points. This change is statistically significant and represents an increase of 19.4 points. In contrast, the control group, which trained using traditional methods like lectures, reading, and discussions without digital tools, only increased by 5.4 points, reaching a level of 67.2, which was not statistically significant.

Percentage changes were calculated as follows: $((\text{post-test score} - \text{pre-test score}) / \text{pre-test score}) \times 100$. For EG, the increase of 19.4 points represents a 31.1 % improvement; for CG, the increase of 5.4 points represents an 8.7 % improvement. These calculations clarify the magnitude of change relative to initial competence levels (Table 1).

Table 1

Change in intercultural competence indicators among students after eight weeks of training

| Group | Before the experiment | After the experiment | Increase | Description of dynamics |
|-------------------|-----------------------|----------------------|----------|--|
| Experimental (EG) | 62.3 | 81.7 | +19.4 | Significant increase in intercultural competence; increased confidence, empathy, awareness |
| Control (CG) | 61.8 | 67.2 | +5.4 | Insignificant improvement; changes are statistically insignificant |

The development of cognitive, emotional, and behavioral aspects of intercultural competency is more strongly influenced by participation in immersive and interactive learning environments that use artificial intelligence, according to these findings. A strong effect was observed in communicative flexibility and interpersonal empathy.

Analysis of qualitative data included coding students' reflective diaries and open-ended survey responses using thematic content analysis. Percentages of participants reporting specific changes were derived by dividing the number of students mentioning a theme by the total number of participants in the experimental group.

An examination of students' reflective diaries and open-ended survey responses showed some changes in how they viewed the learning process. Eighty-three percent of participants in the experimental group reported feeling much more confident when interacting with people from different cultures. Seventy-six percent said they now understand the reasons behind cultural differences and can adjust their behavior accordingly. Seventy percent stated they had developed empathy in listening and the ability to identify emotional cues in tone and nonverbal communication.

Additionally, students noted in their reflective comments that engaging with virtual avatars, especially in Alelo and Hyperspace, helped them recognize and correct their own cultural assumptions during conversations. Many participants indicated that the AI environment significantly reduced anxiety when completing communication tasks by providing a safe space for making mistakes and reflecting.

Teachers also observed that the experimental group showed greater initiative in discussing cultural subjects and had a better level of interest in the learning process. This supports the idea that AI simulations help individuals develop long-term behavioral attitudes necessary for successful intercultural communication, beyond just gaining information.

Overall, both quantitative and qualitative data support the notion that using AI platforms in foreign language instruction greatly enhances students' intercultural competency, making the learning process more dynamic, meaningful, and closer to real-world intercultural communication.

The combination of pre-post quantitative analysis with thematic qualitative analysis provides a robust validation of the effectiveness of AI simulations in developing intercultural competence. The integration of effect sizes, percentage improvements, and CI ensures transparency and replicability of the reported findings.

Discussion

The experiment's findings support the idea that using AI simulations helps students effectively build their intercultural skills. This mirrors findings from European universities where AI-led role-plays resulted in higher empathy scores among international business students [22]. With interactive digital scenarios, participants could recreate real-life conversations with people from other cultures while receiving immediate feedback from the system. This approach improved self-reflection, cultural awareness, and communication strategies tailored to different cultural contexts.

Several factors contribute to the positive effects of AI simulations. First, the immersive environment gives students a sense of complete "immersion" in an intercultural context, allowing them to experience situations that closely mimic real communications. Second, the flexibility of AI ensures personalized learning; the complexity of scenarios and the style of communication adjust according to each student's language skills and intercultural communication abilities. Third, students can spot their own mistakes, adjust their speech and behavior, and develop more polite and adaptable interactions with others thanks to real-time analytics and automated feedback.

Recent international studies [23] indicate that using AI technologies boost motivation, enhances cognitive flexibility, and increases the chances for developing intercultural awareness. These results align well with the current findings.

However, a critical analysis reveals several nuances. While quantitative results show clear improvements in intercultural competence scores, qualitative data suggest that gains are uneven across cognitive, emotional, and behavioral dimensions. For example, cognitive understanding of cultural norms improved consistently, but not all students demonstrated equal advancement in emotional empathy, indicating that AI simulations alone cannot fully replace guided human reflection. This aligns with research by Deardorff (2006), which emphasizes that affective development often requires interpersonal interaction and mentorship.

Students' communication behavior showed not just quantitative changes but also qualitative ones. As their pragmatic and sociolinguistic skills improved, participants in the experimental group began using techniques such as paraphrasing, explaining, and expressing agreement or disagreement in a culturally neutral manner more often. They also paid more attention to nonverbal signals and started considering the cultural traits of their conversation partners.

Despite these benefits, the study highlights limitations in transferability to real-world settings. AI-generated interactions are inherently constrained by the programmed scenarios and cannot fully replicate the unpredictability of authentic intercultural encounters. Students may perform well within controlled simulations but still face challenges when interacting spontaneously with real people from diverse backgrounds.

The study emphasizes that integrating AI simulations into the classroom is not feasible without active teacher support. The teacher's role is to guide the learning process, facilitate reflection, help students analyze what they learn from virtual avatars, and connect the simulation experience to real cultural situations. Without this support, the simulations risk becoming just a technical tool without offering deep intercultural knowledge or personal growth [24; 27-28]. *Moreover, technical and contextual factors affect the efficacy of AI interventions. Variations in students' digital literacy, language proficiency, and prior intercultural experience can modulate the benefits of AI simulations. This suggests that future implementations should combine AI tools with tailored scaffolding to maximize both cognitive and affective outcomes.* The study also revealed some limitations of using AI technology. These include the need to provide teachers with initial technical training, the dependence of simulation effectiveness on the quality of language models and realism of dialogues, and the risk of over-automating the teaching process, which could diminish the value of face-to-face interaction and critical thinking.

Despite these concerns, the study shows how effective AI simulations can be in developing essential soft skills like empathy, tolerance, communication flexibility, and the ability to behave well in intercultural settings, in addition to language skills. In today's global educational environment, incorporating AI into foreign language teaching creates new opportunities for students to develop deeper and more lasting intercultural awareness.

In conclusion, while AI simulations are a powerful supplement for intercultural skill development, their optimal impact is achieved when integrated with reflective teaching practices, direct interpersonal interaction, and continuous evaluation. Future research should explore hybrid models combining AI-mediated practice with real-life cultural immersion to address the observed gaps in affective and behavioral learning outcomes.

Conclusion

The study indicates that integrating AI technology into foreign language teaching has significant potential to improve students' intercultural competence. AI simulations based on interactive dialogues and authentic cultural contexts make it possible to integrate cognitive, emotional, and behavioral learning elements. This creates environments that closely resemble real intercultural interactions.

Research from the Abai Kazakh National Pedagogical University showed that using platforms like Alelo Enskill, Hyperspace, and Gen2Lingo helps individuals improve their language skills and develop the interpersonal skills needed for successful multicultural interactions. Students began to display more empathy, respect for cultural diversity, communication flexibility, and awareness in choosing language tools.

The analysis of data clearly shows that, compared to traditional methods, using AI simulations increases students' intrinsic motivation and engagement levels. However, the teacher's role remains crucial, as they facilitate reflection, provide instructional support, guide how students perceive their interactions with virtual avatars, and promote an understanding of cultural differences.

Despite the clear advantages, it is important to consider several challenges, such as the need for technical resources, training for teachers on using AI tools, and ongoing improvements to language models for better reliability and realism in simulations.

This study demonstrates several key innovations:

1. Integration of multiple AI platforms (Alelo Enskill, Hyperspace, Gen2Lingo) into a single pedagogical system, enabling simultaneous development of cognitive, emotional, and behavioral intercultural skills.
2. Use of an integrated theoretical framework combining Byram, Deardorff, and Bennett models, which allows for a multidimensional and process-oriented analysis of intercultural competence in AI-mediated learning environments.
3. Empirical evidence from the Kazakhstani context, showing that AI simulations can effectively foster soft skills like empathy, tolerance, communication flexibility, and reflective learning, which traditional methods alone cannot achieve.

Therefore, incorporating AI into the teaching and learning process opens new opportunities for students to grow in their intercultural competency and global citizenship. AI simulations are not just a technological advancement; they are innovative teaching tools that have the potential to transform traditional teaching methods, making language learning more dynamic, personally relevant, and aligned with the realities of global communication.

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Ағылшын тілін шет тіл ретінде оқыту үдерісінде жасанды интеллект симуляциялары арқылы мәдениетаралық компетенцияны дамыту мүмкіндіктері

Білім берудің жаһандану мен цифрланудың қазіргі үрдістері шетел тілдерін меңгеріп жүрген студенттердің мәдениетаралық құзыреттілігін дамытуда оқытушылардың рөлін қайта қарауды талап етеді. Жасанды интеллект технологияларын қолдану иммерсивті, интерактивті және бейімделген оқу орталарын құрудың жаңа мүмкіндіктерін ашады. Жасанды интеллект симуляторлары студенттерге шынайы коммуникациялық жағдаяттарды модельдеу арқылы мәдени хабардарлықты, эмпатияны, төзімділікті және тиімді мәдениетаралық қарым-қатынас дағдыларын дамытуға көмектеседі, сондай-ақ виртуалды аватарлармен өзара әрекет етуге мүмкіндік береді. Бұл зерттеуде жасанды интеллекті шетел тілдерін оқыту үдерісіне енгізу арқылы мәдениетаралық құзыреттіліктің когнитивтік, эмоциялық және мінез-құлықтық аспектілерін қолдаудың жолдары қарастырылады. Әсіресе ойын түріндегі өзара әрекеттесуді, автоматты кері байланысты және бейімделген жасанды интеллект модельдерін пайдаланатын платформалардың білім беру әлеуетіне назар аударылады. Бұл технологияның көмегімен студенттер өздерінің өзіндік рефлексиясын, метатанымдық тәсілдерін және коммуникациядағы мәдени контексті түсіну қабілеттерін арттыра алады. Сыныптағы ЖИ симуляцияларын қолдану икемді дағдыларды және интегративті тілдік қабілеттерді дамытуға жаңа мүмкіндіктер ашады. Бұл дағдылар қазіргі жаһанданған қоғамдағы табысты мәдениетаралық және кәсіби қарым-қатынас үшін аса қажет. Зерттеу Абай атындағы Қазақ ұлттық педагогикалық университетінде жүргізіліп, екінші курс студенттері эксперименттік оқу бағдарламасына қатысты. Alelo Enskill, Huperspace және Gen2Lingo сияқты жасанды интеллект симуляциялық платформалары интерактивті мәдениетаралық коммуникация бағдарламаларын жасау үшін қолданылды. Бұл платформалар студенттерге әртүрлі мәдени ортадан шыққан виртуалды кейіпкерлермен шынайы әңгімелер жүргізуге мүмкіндік береді, сонымен қатар тілдік қолдану, прагматикалық үйлесімділік және мәдени сезімталдық бойынша автоматты кері байланыс алады.

Кілт сөздер: жасанды интеллект, ЖИ симуляциялары, мәдениетаралық құзыреттілік, шетел тілдерін оқыту, цифрлық оқыту, икемді дағдылар, мәдениетаралық коммуникация.

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Возможности развития межкультурной компетенции с помощью симуляций искусственного интеллекта в процессе преподавания английского языка как иностранного

Современные тенденции глобализации и цифровизации образования требуют от нас переосмысления того, как преподаватели помогают студентам, изучающим иностранные языки, развивать межкультурную компетентность. Использование технологий искусственного интеллекта открывает перспективные возможности для создания иммерсивных, интерактивных и адаптивных учебных сред. Симуляторы искусственного интеллекта помогают учащимся развивать культурную осведомленность, эмпатию, толерантность и навыки эффективного межкультурного общения, имитируя реальные сценарии общения и позволяя им взаимодействовать с виртуальными аватарами. В данном исследовании рассматривается вопрос о том, как можно внедрить искусственный интеллект в преподавание иностранных языков для поддержки когнитивных, эмоциональных и поведенческих аспектов межкультурной компетентности. В частности, рассматривается образовательный потенциал платформ, использующих игровые формы взаимодействия, автоматическую обратную связь и адаптивные модели искусственного интеллекта. С помощью этой технологии учащиеся могут улучшить саморефлексию, метакогнитивные методы и понимание культурного контекста коммуникации. Использование симуляций ИИ в классе открывает новые возможности для развития гибких навыков (soft skills) и интегративных языковых навыков. Эти навыки необходимы для успешного межкультурного и профессионального общения в современном глобализированном обществе. Исследование проводилось в Казахском национальном педагогическом университете имени Абая с участием студентов второго курса, обучавшихся по экспериментальной программе. Для создания интерактивных сценариев межкультурной коммуникации использовались симуляционные платформы искусственного интеллекта Alelo Enskill, Huperspace и Gen2Lingo. Эти платформы предоставляли студентам возможность вести реали-

стичные диалоги с виртуальными персонажами, представляющими различные культурные среды, а также получать автоматическую обратную связь по использованию языка, прагматической корректности и культурной чувствительности. Результаты исследования показывают, что использование симуляций ИИ значительно повышает межкультурную компетентность студентов, улучшая их коммуникативную гибкость, эмпатию, культурную осведомленность и уверенность в межкультурном взаимодействии. Кроме того, интерактивный и адаптивный характер ИИ-технологий повышает мотивацию и вовлеченность студентов в учебный процесс. Полученные данные демонстрируют, что симуляции ИИ являются эффективным педагогическим инструментом для интеграции обучения языкам с развитием межкультурных навыков и подготовки студентов к полноценному участию в глобальных академических и профессиональных средах.

Ключевые слова: искусственный интеллект, симуляции ИИ, межкультурная компетентность, преподавание иностранных языков, цифровое обучение, гибкие навыки, межкультурная коммуникация.

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