

FOSTERING INTERCULTURAL COMPETENCE: UNLEASHING THE POWER OF AI-BASED TOOLS IN SHAPING STUDENT CRITICAL THINKING SKILLS

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Abstract. Foreign language acquisition extends beyond linguistic competence, offering students access to additional knowledge in subjects like geography, history, and literature. Integrating language learning with other disciplines enables students to use a foreign language as a tool to enhance their understanding of various subjects. This case study illustrates the implementation of AI-based tools in the teaching culture alongside foreign language instruction which aims to impart a foundational critical thinking understanding of the host country's culture. While it shares some similarities with acculturation, the distinction lies in the fact that foreign language learners retain their identity as native speakers of their own culture while enriching their background knowledge with elements from the culture of the language being studied. This process transforms learners into carriers of global culture and enhances their appreciation for their cultural heritage. This article spotlights the revolutionary impact of AI tools in English language education. AI-driven generators have the possibility of transcription and editing capabilities and enhance listening and speaking skills by offering detailed feedback. It discusses how AI-based instruments seamlessly integrate into various learning environments, be in-person or remote, offering personalized guidance for students. The article emphasizes the app's collaborative features, promoting engagement and peer learning, ultimately propelling language education into a new era.

Keywords: intercultural competence, critical thinking, skills, AI-based tools, culture, heritage, environment, abilities

Basic Provisions

Intercultural communication involves a comprehensive understanding between individuals engaged in interaction who belong to different national cultures. Even when people share the same language, mutual understanding is not always guaranteed, often due to cultural differences [1]. In everyday communication, aspects such as conversation models, cultural stereotypes, value orientations, and cultural symbols become crucial in intercultural interactions [2,3].

The development of intercultural competence, an integral part of communicative competence, is a result of gaining insights into the culture of the language being studied and acquiring intercultural communication skills [4]. Creating conditions for learning intercultural communication, enhancing motivation

to study foreign languages, and instilling the foundations of intercultural communicative competence are particularly important challenges. Fostering AI-based generators in the educational process is identified as an effective means for Kazakhstani students to achieve foreign language communication skills at an intercultural level within the curriculum.

Every society possesses a unique national culture reflected in its language. Language mastery involves linguistic skills and an understanding of the cultural values embedded in the language [5]. Language serves as the custodian of culture, transmitting societal traditions, rituals, and customs to succeeding generations.

Certain linguistic and cultural phenomena are so distinctive that they can be comprehensively explored without the need for comparison with other cultural and linguistic communities [6]. Teachers play a vital role in preparing country-specific information tailored to the student's nationality, training goals, language proficiency, and interests. The reliance on the national culture of the learners becomes a fundamental principle in the field of comparative linguistics. comprehensively explored without the need for comparison with other cultural and linguistic communities.

Introduction

In addition, principles for classroom teachers when it comes to suggesting specific activities and methods for teaching culture in second or foreign language classes, efforts have been made to assist teachers in addressing cultural issues appropriately and effectively. Brown (2007) outlined four guidelines for cultural considerations [7].

Teachers possess pathos in their interactions with students regarding cultural matters, recognizing that a student's cultural identity is deeply rooted in emotions. This includes understanding behaviors, expectations, power dynamics, family and peer relationships, tolerance for ambiguity, openness to new ideas, attitudes towards one's own culture and the culture of a second language, and views on individualism versus collectivism [8]. Teachers also consider language conventions such as politeness, formalities, and other socio-pragmatic factors. Language instructors need to be aware of the cultural connotations and nuances in both English and the native language of their students, using them appropriately and with sensitivity in their teaching.

Peterson and Coltrane (2003) proposed the culture instruction approach without emphasizing the importance of presenting cultural information in a nonjudgmental manner that avoids placing a value judgment on distinctions between students' culture and the culture being explored in the classroom. They highlighted that linguistic competence alone is insufficient for language learners to be truly proficient; learners must grasp that language use must align with culturally appropriate behaviors for effective communication. The authors suggested that, rather than implicitly teaching culture through linguistic forms, teachers can explicitly highlight the cultural features reflected in the language being learned [9].

Brown and Eisterhold (2004) described the classical model of culture shock as a U-shaped curve of five stages:

1. The honeymoon stage
2. The stage of disintegration
3. The reintegration stage
4. The stage of autonomy
5. The stage of interdependence [9].

To explain in more detail what each stage means, Brown and Eisterhold stated that in the first stage, the honeymoon stage, the differences observed in the new culture are exciting and attractive. The second stage, disintegration, is a period of frustration and helplessness. During this period, the new culture seems overwhelming, and the reaction of the newcomer is usually depression or withdrawal. At the stage of reintegration, culture seems to be a problem, and the newcomer takes a defensive position, rather than reacting. A beginner at the stage of autonomy has an idea of culture, and his or her opinions are balanced, objective, and relatively positive [11]. Finally, some people reach the stage of interdependence when they adopt a new identity as a bicultural or multicultural personality.

So, this classroom is organized as an opportunity to educate students about diverse cultures and convey that no single culture is superior to another. In situations where cultural differences emerge, teachers guide students in appreciating and celebrating diversity [12]. In learning English as a second language, where students represent various cultures within the same class, teachers should strive to create a model of openness, tolerance, and respect.

Nowadays Artificial Intelligence (AI) due to the swift development of technology and globalization is evident in the educational environment. The implementation of AI-based tools in ELT provides the integration of a theoretical grounding with practical activities most effectively.

Theodosis Karageorgakis, in his article, emphasizes the significance of AI for Generation Alpha, the generation born after 2010. He describes how AI will profoundly impact their lives, like how previous generations experienced technological advancements. AI is poised to enhance efficiency, healthcare, and safety, making it an essential part of Generation Alpha's future. AI will provide personalized support and blur the boundaries between the physical and digital worlds, creating a tangible digital future for this young generation. Karageorgakis's insights highlight why AI matters in shaping the future of Generation Alpha.

AI-based tools are not just tools, they are interactive companions, transforming the way we absorb and comprehend spoken English.

Our era is marked by technological innovation and a growing need for personalized and effective language learning, educators are increasingly turning to artificial intelligence solutions to enrich the English language learning experience. One such groundbreaking tool that has captured the attention of language instructors and learners alike is the AI apps Descript, MagicSchool, Mentimeter, etc.

The positive perceptions of the effectiveness of innovative technologies in facilitating language improvement underscore its potential as a valuable instrument for language and intercultural education.

It is important to consider the curricular demands in terms of content when selecting AI-based tools. In addition, it is vital to focus on the learner group and their

readiness, interests, and learning profiles. Factors such as the learners' age, their level of proficiency, abilities, and background knowledge should also be considered. Additionally, tools are ideally meaningful to learners in that they can relate the plot to their life experiences, emotions, and expectations. Moreover, activities have a beneficial and lasting effect on the learners' development of communicative and intercultural competencies. This best is achieved if a task is chosen that is enjoyable and thematically motivating to learners. Selecting a suitable AI-based generator for a class is a very individual process. To stay up to date, it is important to engage students with multimodal texts that help them develop vital multimodal literacy skills using AI-based applications such as Mentimeter, MagicSchool, Gimkit, Quizalize, edpuzzle, etc. These innovative tools help create engaging and effective presentations, and quizzes in no time, saving precious teachers' energy.

To further this discussion, the outline of task examples illustrates how AI-based tools are integrated into practice.

Materials and Methods

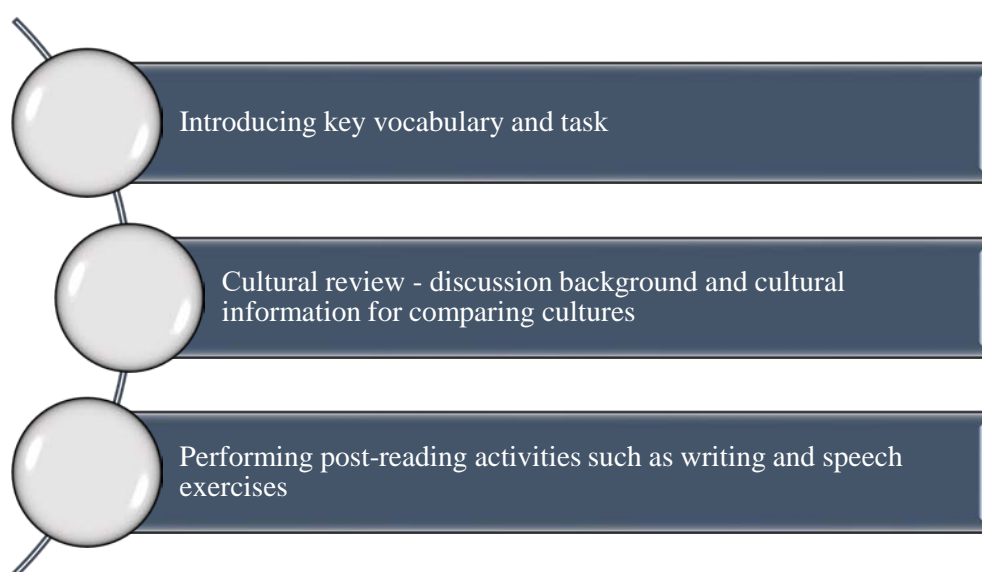
Participants

The participants of this study consisted of 50 students from two parallel University groups. The students were 4th year course. The subject was "Critical thinking skills". The selection of participants from different environments and cultures ensured the reliability and accuracy of the results.

The participants in each class were divided into two groups: experimental and control. The number of students was equal, and their academic performance also was the same.

Instruments

A lesson plan was developed for teaching English using a communicative-intercultural approach. The lesson was divided into three phases according to Scheme 1.



Scheme 1 – Lesson modelling

In the first stage, when learning the language, students were provided with a task “Your friends want to visit Florida to explore the Kennedy Space Center, relax at Miami Beach, and have fun at Walt Disney World. However, Florida’s wildlife includes sharks in the water as well crocodiles and snakes on land, so visitors should be cautious all the time, which may be considered as a drawback” along with a list of vocabulary items with cultural meanings.

In the second stage, cultural review, using any of the following AI-based generators (Mentimeter, MagicSchool, Gimkit, Quizalize, edpuzzle, Descript) discuss the advantages and disadvantages of this trip, select images of these places of interest, create a presentation or poster, and practice collaborative task.

Learners engaged in pronunciation exercises using Descript's voice recognition technology. The student practiced speaking and recording sentences from dialogues focusing on clear pronunciation. Immediate feedback from Descript guided students in improving their articulation, fluency, and pronunciation.

Interactive exercises within AI-based tools included shadowing (repeating spoken sentences), gap-filling activities, and role-play scenarios. The students enjoyed the role-play exercises to act out everyday conversational situations, enhancing their practical language skills.

Throughout the experiment, students were engaged in self-assessment. They listened to their initial recordings and compared them to more recent ones, noting improvements in pronunciation, fluency, and comprehension. Self-assessment served as motivation for learners, reinforcing the sense of achievement and the path toward language proficiency.

In the third stage, when considering enrichment issues, the class discussed them by focusing on intercultural challenges and all aspects of cultural awareness. The students were then asked to perform post-reading activities such as writing an email to inform everyone at the university about the decision and the chosen location. As the tutor, Descript, MagicSchool also proved to be an invaluable tool in the creation of tailored learning materials. The application facilitated the development of suitable video films and audio explanations to clarify complex topics. It streamlined the process of producing engaging and instructive content, benefiting the overall teaching approach.

Data Collection Procedures

The case study was divided into two stages.

Each stage was performed as follows. In the first week, students of the experimental and control groups were asked to take a preliminary test for critical thinking skills. Students in the experimental group were taught using lesson plans based on a communicative-intercultural approach. Students in the control group were taught using the traditional method which referred to the teacher-led approach consisting of the teacher's one-sided discourse and the passive reaction of the students. In addition, the teacher focused only on the elements of a learning culture for the development of the English language.

After 10 weeks, students in both groups were asked to take a performance test, a test for critical thinking skills, and questionnaires to study their attitude to learning culture in the development of a second language.

Data Analysis

An achievement test was developed to compare the literature knowledge of students in the experimental group with those in the control group before and after the experiment.

We implemented as an assessment criterion a set of critical thinking skills tests. This set has also been developed to measure five levels of critical thinking skills: 1) understanding; 2) analyzing arguments, statements, or evidence; 3) drawing conclusions using inductive or deductive reasoning; 4) judging or evaluating; and 5) making decisions or solving problems.

Finally, a set of questionnaires was prepared for the students of the experimental and control groups to study the attitude of students to learning culture when learning English. It included 15 points and was divided into three parts: opinions, feelings, and propensity for action. The reliability and usability of the product were determined during the pilot phase study.

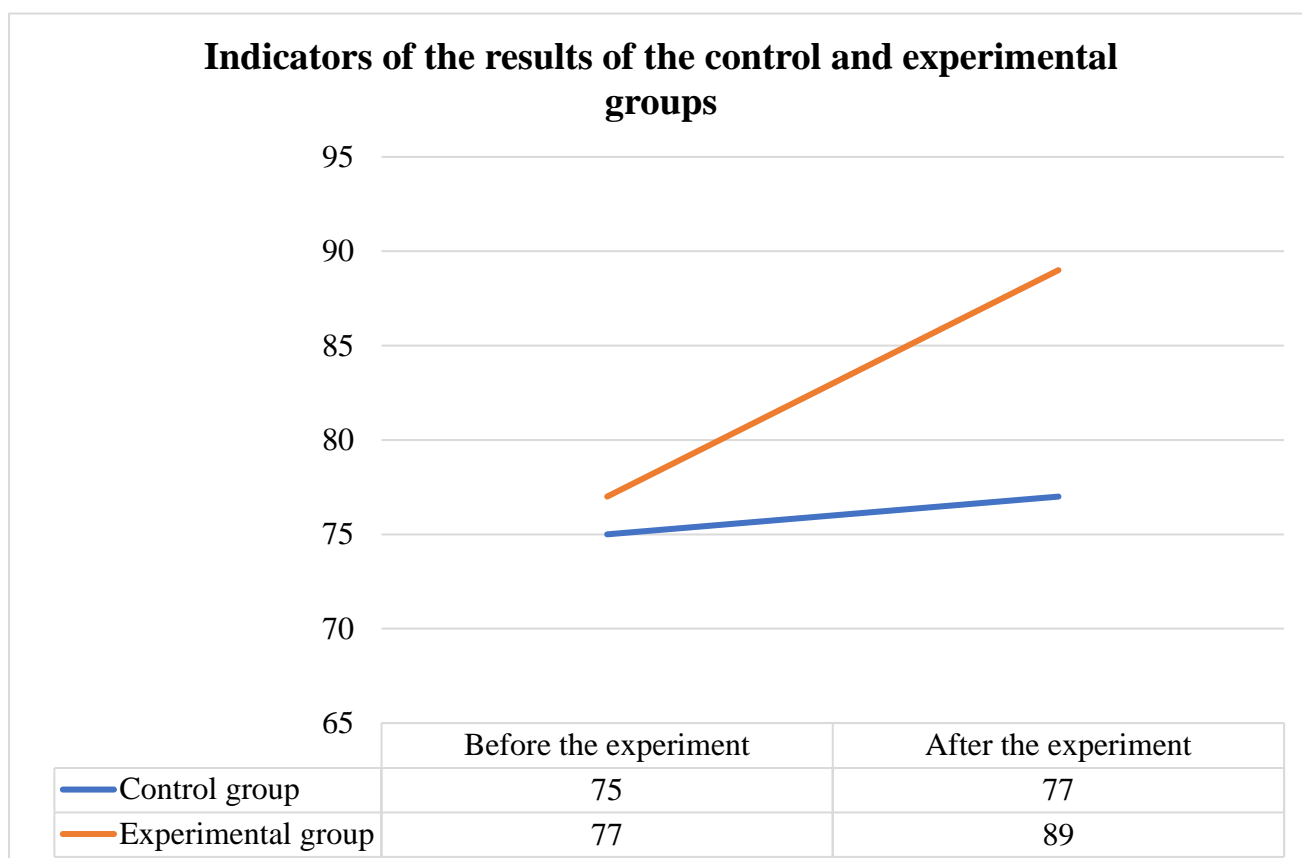
Discussion and Results

The data of the achievement test and the critical thinking skills test were evaluated.

At the beginning of the case study, we calculated each learner's score and then divided it by the total number of learners. The experimental group's achievement was 77, and the achievement of the control group was 75.

The same calculation was done at the end of the study. The experimental group's achievement was 89, and the result of the control group was unchanged.

The following results were demonstrated in Scheme 2.



Scheme 2 – The results of the case study

Learners were also asked questions that reflected their interests, ways of obtaining information about the culture of the language being studied, experience in communicating with representatives of other cultures, and difficulties in communicating with them. Some questions involved expressing their own opinions and requiring additional comments.

This component increased by 12%, this indicates that the control stage learners productively performed various tasks that contribute to the formation of certain skills.

As a result of comparing post-experimental and pre-experimental indicators, it can be concluded that the experimental work effectively contributed to the formation of the quality of knowledge and students' cognitive activity.

Conclusion

Researchers hold different positions regarding the relationship between language and culture. It appears insufficient to comprehend one facet without considering the other when seeking a comprehensive understanding of a particular community. Consequently, acquiring proficiency in a language necessitates an exploration of its associated culture, and conversely. In the context of instructing second and foreign languages, a sole focus on linguistic mastery, devoid of cultivating a profound understanding of the target culture, may result in an asymmetry in students' knowledge. Hence, while students may attain a high level of linguistic competence, their cultural competence in the studied language might not be proportionate.

The integration of AI-based tools plays a pivotal role in the dynamic interaction between teacher and student, particularly in the realm of foreign language education. The utilization of multimedia elements such as images, graphics, and musical animations proves crucial in conveying a foreign language. Elements like shapes, tools, palettes, design, linguistic nuances, and artistic expressions exemplify the diverse components employed in this approach. The amalgamation of these elements enriches the learning experience and contributes to a holistic understanding of a foreign language. This approach has been observed to engage all senses, enhance cognitive abilities, stimulate analytical thinking, foster visual perception, and establish the groundwork for the comprehensive assimilation of instructional context.

This case study highlights the incorporation of information technology in the classroom setting that creates an immersive and natural learning environment. It not only furnishes practical examples of conversation but also cultivates and enhances students' critical thinking skills.

REFERENCES

- [1] Holdos R. Digital and Media Literacy. Connecting Cultures and Classroom. Corwin, Thousands of Oaks. - California. 2011. - P.25-40

- [2] Darvin R., Norton B. Investment, and motivation in language learning: What is the difference? Language Teaching/ - Cambridge Press, 2021. - P.1-12
- [3] Munoz C. A new look at age: young and old L2 learners. The Cambridge handbook of language learning, 2019. - P.430-540
- [4] Kunanbayeva S.S. The Modernization of Foreign Language Education: the Linguo-Cultural Communicative Approach. United Kingdom: Hertfordshire Press, 2013. – 293 p.
- [5] Baker W., From cultural awareness to intercultural awareness: culture in ELT. – Oxford: ELT Journal, Volume 66, Issue 1, 2012. – 67 p.
- [6] Samovar, A., Porter, E., McDaniel, R. Communication Between Cultures. - Boston: Wadsworth, 2009. – 16 p.
- [7] Brown H.D. Teaching by principles. New York, Pearson Education, 2019. – 78 p.
- [8] Marlon D. Sipe. Teaching as Intercultural Communication: A sociocultural study of Teaching English as a second Language in an Asian Country. Journal of Intercultural Communication research, 2021. – p.631-646
- [9] Chia-Ti H. Tseng. Teaching Cross-cultural through content-based instruction: Curriculum design and learning outcome from EFL Learners’ perspectives. English Language Teaching, 2017. - Vol.10. - N.4, – p.22-34
- [10] Waller L., Wethers K., Peter I.de Costa. A Critical Praxis: Narrowing the Gap between Identity, Theory and Practice. TESOL Journal. – 2017. - 8.1. – p.4-24
- [11] Karageorgakis T. Gen Alpha: Growing up in the era of Artificial Intelligence. Educraft Journal. - 2023. - №3. - P.52-57
- [12] Lakshmanan B., Robinson C., Munn M. Machine teaching. Patterns of designing. O’Reilly. 2022. – P.319
- [13] Sadyrova A.T., Mukhametkalieva G.O., Seitkazyev R., Aripbayeva L.Sh. Development of professional culture of future specialists in the education system \ KazUIRandWL named after Ablaihan “Bulletin”. - 2024. – Volume 72 ,(1).– p.201-214

**МӘДЕНИЕТ АРАЛЫҚ ҚҰЗЫРЕТТІЛІКТІ ҚАЛЫПТАСТЫРУ:
СТУДЕНТТЕРДІҢ СЫНИ ОЙЛАУ DAҒДЫЛАРЫН
ҚАЛЫПТАСТЫРУДА ЖАСАНДЫ ИНТЕЛЛЕКТ ҚҰРАЛДАРЫН
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Аңдатпа. Шетел тілін меңгеру лингвистикалық құзіреттілік шеңберінен шығып, студенттерге география, тарих және әдебиет сияқты пәндер бойынша қосымша білім алуға мүмкіндік береді. Тіл үйренуді басқа пәндермен интеграциялау студенттерге шетел тілін әртүрлі пәндерді түсінудің құралы ретінде пайдалануға мүмкіндік береді. Бұл тәжірибелік

мысал оқып жатқан елдің мәдениеті туралы іргелі сыни ойлауды түсінуге бағытталған шетел тілін оқытумен қатар оқыту мәдениетінде жасанды интеллект негізіндегі құралдарды енгізуді көрсетеді. Оның аккультурациямен кейбір ұқсастықтары бар болса да, шетел тілін үйренушілер ана тілінде сөйлейтін тұлғалар ретінде өздерінің бастапқы мәдени білімдерін сақтап, оқып жатқан тіл мәдениетінің элементтерімен байытады. Бұл үдеріс үйренушілерді жаһандық мәдениеттің тасымалдаушыларына айналдырады және олардың мәдени мұраларына деген түсінікті арттырады. Бұл мақала жасанды интеллект құралдарының ағылшын тілін оқытудағы революциялық әсерін көрсетеді. Жасанды интеллект басқаратын генераторлардың транскрипциялау және өңдеу мүмкіндіктері бар және егжей-тегжейлі кері байланыс ұсыну арқылы тыңдау және сөйлеу дағдыларын жақсартады. Ол жасанды интеллект негізіндегі құралдардың әртүрлі оқу орталарына қалай үздіксіз кіріктірілетінін, жеке немесе қашықтан болуын, студенттерге жеке нұсқауды ұсынатынын талқылайды. Мақалада бағдарламаның бірлескен мүмкіндіктеріне баса назар аударылады, олар өзара әрекеттесуді және студенттерді оқытуды ынталандырады, сайып келгенде, тіл білімін жаңа дәуірге жетелейді.

Тірек сөздер: мәдениетаралық құзыреттілік, сыни ойлау, дағдылар, жасанды интеллект негізіндегі құралдар, мәдениет, мұра, қоршаған орта, қабілеттер

ФОРМИРОВАНИЕ МЕЖКУЛЬТУРНОЙ КОМПЕТЕНЦИИ: ВНЕДРЕНИЕ ИНСТРУМЕНТОВ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА ДЛЯ ФОРМИРОВАНИЯ НАВЫКОВ КРИТИЧЕСКОГО МЫШЛЕНИЯ У СТУДЕНТОВ

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Аннотация. Овладение иностранным языком выходит за рамки лингвистической компетенции, предлагая учащимся доступ к дополнительным знаниям по таким предметам, как география, история и литература. Интеграция изучения языка с другими дисциплинами позволяет учащимся использовать иностранный язык как инструмент для улучшения понимания различных предметов. Этот практический пример иллюстрирует внедрение инструментов на основе искусственного интеллекта в культуру преподавания наряду с обучением иностранному языку, целью которого является привитие фундаментального критического мышления, понимания культуры принимающей страны. Хотя он имеет некоторое сходство с аккультурацией, различие заключается в том, что изучающие иностранный язык сохраняют свою идентичность как носителей своей собственной культуры, одновременно обогащая свои базовые знания элементами культуры изучаемого языка. Этот процесс превращает учащихся в носителей глобальной культуры и повышает их понимание своего культурного наследия. В этой статье освещается революционное влияние инструментов искусственного интеллекта на образование английского языка.

Генераторы, управляемые искусственным интеллектом, имеют возможность транскрипции и редактирования, а также улучшают навыки слушания и разговорной речи, предлагая подробную обратную связь. В нем обсуждается, как инструменты на основе искусственного интеллекта легко интегрируются в различные среды обучения, как очные, так и удаленные, предлагая учащимся индивидуальное руководство. В статье подчеркиваются функции приложения для совместной работы, способствующие взаимодействию и взаимному обучению, что в конечном итоге продвигает языковое образование в новую эру.

Ключевые слова: межкультурная компетенция, критическое мышление, навыки, инструменты искусственного интеллекта, культура, наследие, окружающая среда, способности