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# DEVELOPING INTERCULTURAL COMMUNICATIVE COMPETENCE THROUGH VIRTUAL REALITY

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#### **ABSTRACT**

The development of intercultural communicative competence has a positive effect on the adaptation of a person in society, the formation of a new worldview. The aim of the study is to determine the advantages of developing intercultural communicative competence using virtual reality (VR). The study employed the methods of analysis, observation, comparison, the mathematical method of parallel forms, calculations of the J. Phillips criterion, Cronbach's α. The process of developing communicative skills in foreign language learning involved the analysis of cultural stereotypes, expanding verbal and non-verbal techniques, solving intercultural situations, and student interaction. The training was conducted using ClassVR (Group 1) and ENGAGE (Group 2). The results showed that the ClassVR application had a greater impact on the development of language skills (M=45.3), ENGAGE — social skills (M=47.2). It was found that the learning process had a positive significance for the development of language competence (94%), critical thinking (92%) for the students of Group 1. The students of Group 2 developed the skills of clarity of development of cultural strategies (95%), flexibility of communication (93%). It was determined that the students of Group 1 achieved a high level of communication during interaction with other students from the group (M=47.2), Group 2 – with students from other countries (M=48.2). The obtained results reveal the advantages of VR for the possibility of developing students' intercultural communicative competence. The practical significance of the article is the possibility of adapting VR to the foreign language learning. The research prospects are aimed at ensuring the development of intercultural communication for students from Ukraine and Great Britain. They provide for the analysis of the possibility of achieving intercultural competence in the study of English and Ukrainian and achieving high-quality interaction between students. The results will be put in practice through the use of ClassVR and ENGAGE as well.

**Keywords:** Social Environment, Interactive Opportunities, Cultural Stereotypes, Verbal Techniques, Intercultural Situations, Virtual Reality, Educational Technologies.

#### 1. INTRODUCTION

The development of students' intercultural communication skills should be aimed at enabling them to adapt to a new society, cultural development, and new worldview [1]. Eliminating the language barrier contributes to expanding students' knowledge

and thinking. This process can be implemented using VR, which contributes to the transformation of intercultural communication and affects the relevance of the chosen direction.

Intercultural communicative competence reflects the development of communication skills that promote understanding the features of a certain

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social environment, its cultural specifics [2], [3]. This helps to eliminate differences in interaction not only in another cultural environment, but also in the facilitated perception of a foreign language during study. The development of students' foreign language potential contributes to solving the assigned educational tasks and affects the faster students' adaptation in another cultural environment [4], [5]. The development of intercultural communicative skills should be aimed at finding similar cultural elements, expanding knowledge about another culture, thereby eliminating misunderstandings [6].

The effectiveness of the educational process for the development of intercultural communicative competence can be increased through the active students' participation. VR makes it possible to implement such a strategy [7]. Virtual technologies enable choosing the most relevant strategies for students. This contribute to the development of communicative skills, focusing on contact, current values of a certain culture, orientation [8]. The use of virtual technologies in foreign language learning ensures the development of emotionality, synchronicity, and conciseness. They make it possible to move away from traditional forms of learning, which motivates students to expand independent learning.

Virtual technologies help to identify gaps in when students' knowledge understanding intercultural differences in foreign language communicative competence [9]. Virtual technologies allow for a comprehensive approach to learning, focusing on generalization and systematization of knowledge. The flexibility of the educational process promotes the transformation of the existing programme to avoid intercultural misunderstandings [10]. Virtual technologies provide the use of a variety of intercultural information, thereby raising students' awareness. This provides a better understanding of the principles of cultural communication, its diplomatic approaches. Virtual technologies enable a group of students to unite for joint study of a particular topic [11].

Based on the analysed theoretical information, it was found that aspects of intercultural communicative competence are a common approach to learning. However, the use of VR in student education requires improved mechanisms that can be adapted to the existing curriculum. The aim of the research is to determine the advantages for the development of students' intercultural communicative competence using VR. The aim involved the fulfilment of the following research objectives:

- Develop a mechanism for foreign language learning using VR;
- Determine the impact of ClassVR and ENGAGE on the development of language and social skills;
- Determine the skills that were developed in students during the educational process;
- Establish the level of students' intercultural communicative competence during interaction with students from the group and native speakers.

#### 2. LITERATURE REVIEW

Digital technologies are an effective tool for improving the language competencies of future teachers. This is determined by the possibility of approaches to language expanding communicative development. These approaches help to achieve a better transfer of knowledge from teachers to students [12]. Such results give grounds to conclude about their importance for learning a foreign language. However, the study does not consider specific strategies for improving language skills that contribute to enhancing the competence of students and teachers. The introduction of Digital Storytelling in multilingual classes is an effective tool for learning English as a foreign language. Students' perception of short stories using animation, audio and video provides the opportunity to develop communication skills, enrich their vocabulary.

Systematic repetition of vocabulary and grammar, cultural diversity had a positive effect on achieving high results [13]. We agree with this statement, but the use of VR would contribute to achieving higher results. The study also does not specify which cognitive skills can be developed first when learning a language using Digital Storytelling. ChatGPT can be used as one of the mechanisms for developing intercultural communication skills. The language skills develop as a result of receiving feedback, the possibility of using the principles of diversity. The process provides a flexible role for the teacher and student autonomy [14]. Artificial intelligence (AI) has an impact on expanding students' vocabulary and grammar due to the constant use of various approaches to learning. This enables the use of a larger number of words that reflect the culture of another country, focusing on more unique words.

ChatGPT improves foreign language learning, especially for migrants, facilitating their adaptation and socialization in another country [15]. ChatGPT can be used as one of the learning tools, but it has limited capabilities compared to virtual

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technologies in terms of developing practical skills. However, there are still insufficiently studied issues regarding the use of ChatGPT, such as determining the specifics of its impact on students' perception of additional workload during theoretical classes.

The development of communication skills during foreign language learning is promoted by the use of the STEMUP programme. Programme combines augmented reality (AR) and automatic speech recognition. The findings showed an increase in student success and a better perception of the surrounding world [16]. The obtained results are correct, but the mechanisms for using AR require more specifics. It is necessary to specify which process of using the STEMUP program for studying theory and acquiring practical skills can be applied. Attention should be paid to the educational topics that can be implemented using STEMUP and their compliance with the curriculum of higher education institutions.

Gamification can be used as a mechanism for motivating students to increase academic activity. Its use improves listening, speaking, and writing skills. Gamification is also applied in the transformation of learning, which ensures a successful educational experience [17]. For the depth of the study, it is necessary to specify which gamification approaches can be used to teach junior and senior students. It is also necessary to determine whether gamification has a positive impact on senior students compared to other teaching approaches.

Educational conversational technologies FORVO, YouGlish, and OALD 8th ed contribute to improving students' speech. The improvement of students' speaking skills affected coherent and fluent speech, the ability to use rich lexical resources, and different grammatical ranges [18]. The effectiveness of these interactive technologies is significant, but issues of intercultural communicative competence are poorly studied. To fill in the gaps in the research, it is necessary to determine which of the conversational technologies FORVO, YouGlish, and OALD 8th ed. is most effective in teaching.

Self-regulated learning is an effective strategy for foreign language learning, as it promotes meaningful learning of vocabulary, grammar, writing, and speaking. This expands approaches to the perception of errors by students, increasing control, and optimizing learning. However, independent foreign language learning requires technological support for enhancing motivation for systematic learning [19]. The authors lack thorough analysis of the technological support used and its

adaptation to the learning process. The interactive tool Education 4.0 ELSA (English Language Speech Assistance) helps to improve professional communication skills in English as a foreign language (EFL). Multimedia learning motivates students to learn and eliminates limitations during communication [20].

However, the study does not indicate whether it is possible to use Education 4.0 ELSA to learn a language for a specific specialization. The interactive technologies are used during learning for the presentation of a high-quality theoretical background for learning, expanding the perception of specialized words. Intercultural communicative competence is achieved on the basis of social constructivism. Intercultural education should ensure a quality distribution of language and culture [21]. These conclusions are correct, but need to be expanded through the use of the interactive tools. The significance of the study can be expanded by identifying specific elements of intercultural communicative competence that can be developed while learning a foreign language.

The analysis of studies showed the prevalence of interactive tools for a foreign language learning and expanding communication skills. Attention is paid to the study of specialized words that improve communication. However, the issues of integrating VR into the educational process and studying the features of intercultural communication are poorly studied. The use of conventional digital applications has an expanded meaning for learning. But the widespread use of VR in the educational process for the development of intercultural communication requires detailed study.

#### 3. METHODS

#### 3.1. Research Design

The first stage of the study was aimed at elaborating mechanisms for the development of intercultural communicative competence (Figure 1). This involved learning a foreign language to expand students' intercultural communicative competence, which implied choosing appropriate interactive technologies. The emphasis was placed on virtual technologies (ClassVR, ENGAGE), as they make it possible to immerse oneself in the learning process and ensure interaction with native speakers. The study was conducted during four months to avoid gaps in the development of students' intercultural communicative competence.

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ISSN: 1992-8645 www.jatit.org E-ISSN: 1817-3195 Analysis of cultural stereotypes of another language Focus on expanding verbal and non-verbal techniques for foreign language learning Resolving specific intercultural situations Enhancing student interaction in groups

Figure 1: Mechanisms for the development of intercultural communicative competence based on VR Source: developed by the authors

The analysis of cultural stereotypes of another language is one of the most priority approaches to learning. As it allows for a deeper perception of a foreign language, developing intercultural communication skills. Their study provides an effective understanding of another language, focusing on the specifics, norms of behaviour of people in other countries. Based on their consideration, students can better interact in society, minimizing differences in views. This provides orientation not only to classical pronunciation, but also adaptation to modern communication requirements.

Students' intercultural communicative competence was developed, first of all, through an orientation for expanding verbal and non-verbal foreign language learning techniques. Verbal communication was aimed at the correct construction of lexical structures for the purpose of in-depth study of a foreign language. Non-verbal competence was necessary for a better understanding of the culture of another language. As it was aimed at reproducing the appropriate intonation, facial expressions, volume gestures, tone, of communication.

Solving specific intercultural situations became necessary for using the knowledge gained in grammar and linguistics. VR provided immersion in a separate atmosphere (professional, cultural, attending social events, etc.). Which ensured the expansion of free communication skills, using aspects of specific cultural features of another country. This allowed students to develop skills in the free use of English, its accents, dialect features.

Enhancing student interaction in groups was aimed more at developing students' communicative skills. For greater efficiency, working in groups involved interaction not only with students, but also with native speakers using VR. This allowed for a broader study of their behavioural and cultural characteristics, which are advisable to use in communication on a particular topic. The learning process involved learning the language through everyday life, multiculturalism, and ethnonationality.

The second stage of the study was aimed at determining the advantages of ClassVR and ENGAGE for students of different groups. The advantages of virtual technologies were determined based on their linguistic and social significance. The third stage of the study was focused on determining the skills that were developed in students. The skills were determined based on intercultural communicative competence. The level development of foreign language competence among students was also determined at the third stage of the study.

#### 3.2. Sampling

The study involved 136 1st-2nd year students studying a foreign language at Dnipro State Agrarian and Economic University and Lviv Polytechnic National University. The students studied English as a foreign language. The restrictions on students were related to the year of study, as the involvement of senior students could provide not entirely correct results. This is explained by their deeper knowledge of a foreign language, which would require the search for new learning mechanisms. Senior students have more extensive knowledge of a foreign language, this would not ensure equality of the study participants.

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Comparing different learning mechanisms would not allow us to clearly determine the effectiveness of the ClassVR and ENGAGE virtual technologies. The choice of VR was made based on their practical capabilities to implement the abovementioned research mechanisms. The students were divided into two groups of 68 people each. The distribution into groups was uniform, which did not involve orientation on certain criteria. Group 1 included students who studied using the ClassVR. Group 2 consisted of students who used ENGAGE for their studies. As two groups of students used different technologies in their studies, a control group was not provided.

#### 3.3. Methods

The study employed the following methods:

- Comparison was used to determine students' ability to navigate intercultural interaction, understanding differences in language culture. When using practical knowledge, students also took into account knowledge of cultural specifics, the ability to adapt to solving situational tasks. It also included mastery of language skills and the manifestation of empathy.

- Observation enabled 8 teachers to clearly control the process of improving intercultural communicative competence. This was related to the correctness and originality of the tasks, the degree of fluency in the already acquired knowledge. Quantitative and qualitative indicators were taking into account during observation. Quantitative indicators involved taking into account students' assessments, qualitative indicators — students' behaviour when solving situational tasks and mastery of their own knowledge.

The final results reflected the number of students who were able to achieve the development of these skills during the educational process. The values obtained from students became the basis for calculating the J. Phillips criterion [22]. The use of the criterion was aimed at determining the reliability of the obtained results. The choice of the J. Phillips criterion was made in order to obtain a clearer connection between the obtained results. The calculation results of the selected criterion are associated with balance, which helps to avoid extremes during the calculation. The criterion helps to obtain stable data, which eliminates unpredictable results.

$$p = 1 - \frac{6\sum d^2}{n^3 - n} \tag{1}$$

d – average deviation;

n – number of calculated indicators.

- the mathematical method of parallel forms was used to check the statistical reliability of the obtained results. It was planned to compare different tests by using this method. The stability method was used as the first test, which involved measuring the results twice to identify their stability. Cronbach's  $\alpha$  was also calculated to determine the additional reliability of the students' results (second test). The value of the results was equal to 0.75, which confirms the reliability of the results, as the Cronbach's  $\alpha$  value should be at least 0.7 [23]. The formula for the calculation is given below:

$$\alpha = \frac{N}{N-1} \left( 1 - \frac{\sum_{i=1}^{N} \sigma_{\chi_i}^2}{\sigma_T^2} \right)$$
 (2)

*N* – number of criteria

 $\sigma_{\chi_i}^2$  – variance of a single criterion

 $\sigma_T^2$  – total variance.

- the method of analysis was applied in calculations of the above-mentioned criteria of J. Phillips and Cronbach.

#### 3.4. Instruments

Oprosso was used to collect information from students, which allowed to speed up the process using an automated function. Microsoft Excel was used to analyse the received initial data and further perform the necessary calculations. ClassVR contributed to a better and more detailed understanding of the foreign language educational materials, which allowed students to practically develop intercultural communication skills. ClassVR contributes to a better and more detailed understanding of the foreign language educational materials. The process was aimed at the possibility of conducting interactive classes, which provided the opportunity to virtually move in cultural environments. This enabled students to practically develop intercultural communication skills. ClassVR is easy to use and requires the use of ordinary VR glasses, which can exclude expensive models. It enables creating various situations of intercultural communication due to the orientation to the individual level of foreign language competence of each student (Figure 2).

31st October 2025. Vol.103. No.20

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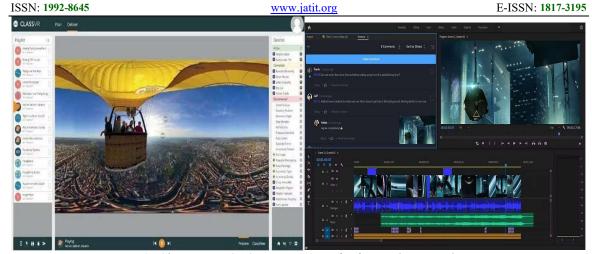


Figure 2: ClassVR, ENGAGE programmes for foreign language learning Source: ClassVR, ENGAGE, 2024

ENGAGE also provided the realization of intercultural situations, but as a result of interaction with people from other cultures who used the application. The students' learning involved immersion in a 3D environment, ensuring the development of communication skills as a result of simulation approaches and experience exchange. The advantages of the application are associated with the possibility of joint interaction of a group of students in real time, using audio or video communication. Therefore, the application promotes intercultural interaction, which expands students' thinking to solve various social situations (Figure 2).

#### 4. RESULTS

The research involved determining the most effective technology used in the educational process. Therefore, it the virtual technologies ClassVR and ENGAGE were compared. The comparison consisted in determining the linguistic and social benefits of a particular virtual application (Table 1).

Table 1: Assessment of the impact of virtual technologies on linguistic and social value

Opportunity level	ClassV		ENGAG E		p
	M	SD	M	SD	
Linguistic meaning	45.3	4.2	44.1	4.3	0.824
Social meaning	38.1	5.8	47.2	3.9	0.832

Source: developed by the authors

A comparison of two technologies that were used in the educational process of students of different groups showed a different impact on learning a foreign language from the perspective of linguistic and social

criteria. ClassVR had a greater impact on the development of language skills. This is determined by the main functions of the programme, which contributes to the students' immersion in the language environment. The presented exercises are aimed at expanding vocabulary, taking into account cultural specifics. The technology also allowed to monitor the students' pronunciation, perceive foreign words by ear. Improving language skills was associated with expanding the boundaries of information perception, which ensured the achievement of the set educational objectives.

Virtual reality ENGAGE had a greater impact on the development of social skills. As first of all it provided for the development of interaction between both students in the group and students from different countries. This VR ensured the creation of intercultural situations, which allowed students to develop their own specific foreign language skills. The ability to choose different topics influenced the expansion of students' ideas about foreign language interaction, focusing on solving educational professional or everyday tasks. Of course, ENGAGE had an impact on the development of students' language skills, taking into account the rules of communication in different countries, cultural, social features. The development of language competence was associated with participation in intercultural dialogues of various thematic directions. The obtained results indicated the difference between the linguistic value of the used virtual realities ClassVR and ENGAGE (0.824) and social value (0.832), despite the slight advantages of one application over the other. The data correlate with each other, as the results do not exceed 1.

The study was aimed at determining the level of development of students' intercultural

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communicative competence. The development of the skills acquired by students was provided for a detailed study. The results are presented in Figure 3.

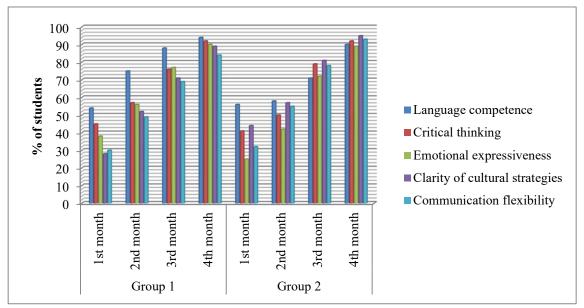


Figure 3: Comparison of intercultural competence skills between two groups of students Source: developed by the authors

First of all, students in Group 1 were able to achieve the development of language skills. This was reflected in a sufficient amount of vocabulary, correct reproduction of lexical and grammatical constructions. Students could clearly understand the language expressions. differences in development of critical thinking allowed them to use instant analysis for a more precise choice of a phrase or a certain judgment. This also involved taking into account the appropriate context to achieve the necessary social interaction. **Emotional** expressiveness in students in Group 1 manifested in the ability to clearly distribute emotions, which allowed maintaining communicative contact with native speakers. Communication was characterized by greater openness and emotionality, changing the strength of the voice, intonation.

Students of Group 2 were able to first of all reproduce the clarity of cultural strategies, which ensured an understanding of the differences of a certain social situation. During communication, students not only clearly combined grammatical and strategies, but also reflected corresponding cultural constructions. This approach influenced the ability to adapt students' communication to the appropriate styles, focusing on the manifestation of students' professional skills. This ensured the flexibility in communication,

combining not only verbal, but also non-verbal communication techniques. This contributed to the free use of words to maintain a high level of intercultural competence.

The level of intelligence development among students was determined using VR. The process involved assessing the development of foreign language competence during interaction with students from the group and students from other countries in a foreign language space. The results are shown in Table 2.

Table 2: Level of development of students' intercultural communicative competence

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Opportunity	Group 1		Group 2					
level	M	SD	M	SD	p			
Students from the group	47.2	4.1	47.9	4.2	0.846			
Students from other countries (native speakers)	43.0	5.2	48.2	4.0	0.831			

Source: developed by the author

Involving students in intercultural situations showed that students in Group 1 were able to achieve the highest communication results during interaction with students from the group. The development of foreign language competence consisted in the correct

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use of lexical and grammatical constructions. Interaction with students from the group allowed them to reveal their own potential, to more freely develop the acquired foreign language skills. Interaction with students in virtual space also achieved a high level, but required partially efforts additional communicative to differences in cultural specifics.

Students of Group 2, on the contrary, could freely interact with native speakers (students from other countries) in VR, which was associated with the features of the ENGAGE application. They could use correct words, pronunciation, intonation, which helped to minimize language problems. Besides, students easily used new words, avoiding complex constructions that would overload the ear. Communication was characterized by clarity and preservation of the necessary emotionality. Communication was characterized by the dynamics and depth of the studied issue. Statistical comparison of students from different groups showed a relationship between the obtained level of intercultural development students' of communicative competence. This confirms the high effectiveness of ClassVR and ENGAGE. The respondents' interaction with students from the group during the development of intercultural communication showed a value of 0.846; during interaction with students from another country — 0.831, which does not exceed the critical value of 1 and confirms the consistency of the results.

#### 5. DISCUSSION

The development of intercultural competence is a linguistic phenomenon that facilitates professional meetings. The development of intercultural competence should involve significant work on texts, expanding their content, and focusing on intercultural interpretation [24]. The development of intercultural competence should involve a combination of psychological and social factors. The development can be achieved using a hybrid approach that includes a modelling approach and an artificial neural network. This makes it possible to hold virtual meetings that contribute to the expansion of students' knowledge [25]. Foreign language learning should involve the development of digital literacy.

This contributes to the implementation of a transformative approach to language learning, which involves the use of multicultural, multilingual, and multimedia approaches. Their use ensures the development of students' critical thinking [26]. The AI use for learning English is focused on ease of use,

expansion of communication skills, better perception of materials. ChatGPT ensures the development of students' creative potential, thereby increasing it [27]. The above-mentioned researchers paid attention to the development of foreign language competence as a result of taking into account psychological, social, and informational factors. In our article, the emphasis was placed on the possibility of expanding students' foreign language knowledge and intercultural communication with students from other countries.

Interactive educational innovations are aimed at improving academic activity. VLabs technology during the educational process provided students with access to virtual laboratories, which contributed to the self-regulation of the educational process. This ensured professional orientation, visualized information, and expanded students' learning experience [28]. VR allows for an experimental approach to learning, creating a new environment for student interaction. This allows students to maintain interest in learning.

The use of VR provides multidimensional interaction between students to achieve better results [29]. Virtual learning is one of the tools for improving intercultural competence. Such a process contributes to the development of students' selfexpression, building intercultural connections based on the involvement of informative materials. Students can deepen their knowledge of a foreign language and develop interpretive approaches [30]. In the presented studies, the emphasis is on the possibilities of developing students' independence and self-expression through the use of VR. In our article, the emphasis is more on the possibility of achieving student interaction in a environment to expand intercultural communicative competence.

VR provides high potential in foreign language learning. It provides an opportunity to conduct virtual excursions that are part of professional education. Achieving high results is possible due to ease of use, expansion of practical professional skills [31]. AR contributes to the development of students' interest in learning a language. And ensures the development of real accelerated programmes for studying vocabulary, pronunciation, grammar, reading, writing. AR makes it possible to develop language skills and provide imitation of immersion in a foreign language environment [32, 33]. The use of information technologies is an auxiliary means of learning a foreign language. AR provides a combination of culture, features of society for a better understanding of a foreign language. This improves

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students' enthusiasm and interaction with the environment [34, 35].

The use of VR and AR in published works involves visiting virtual excursions for learning a foreign language. In our article, the application of virtual technologies has been significantly expanded, ensured continuous development intercultural communicative competence. During the study of ClassVR technology [36], ENGAGE [37] was studied from the perspective of social and linguistic significance. The practical use of the obtained results may be associated with the expansion of the mechanisms for implementing the educational process when learning a foreign language. The obtained results provide the opportunity to focus on the practical training of students, paying attention to the formation of foreign language skills.

#### 5.1. Limitations

The limitations of this study are related to the use of VR for the development of intercultural communicative competence excluding conventional digital applications. It is planned to involve another group of students to compare the effectiveness of different innovative technologies for the development of intercultural communicative competence. These limitations do not have a significant impact on the obtained results, as the study compared two virtual technologies.

One thing that wasn't really looked at in the study is the lack of a correlation calculation between the intercultural competence skills picked up by students from different groups over 4 months of learning. Comparing the effectiveness of virtual technologies and conventional digital applications should take into account the capabilities not only of students from the group but also of students from other countries. The analysis process should consider the initial different levels of knowledge of students to determine the advantages of the technologies used.

#### 5.2. Recommendations

Virtual reality is a modern tool for improving the educational process. The choice of correct mechanisms and virtual technologies expands the possibility of achieving higher results in the development of students' intercultural communicative competence. These results are associated with the development of not only social skills, but also language skills.

#### 6. CONCLUSIONS

The obtained results reveal the tasks set for possibility of developing intercultural communicative competence. The results confirm the relevance of the chosen direction of research, as virtual reality expands the skills of intercultural communicative competence, focusing on the personalization of learning. The use of ClassVR and ENGAGE facilitated the study of English by students for whom it is a foreign language. VR contributed to the students' immersion in the learning process, understanding of intercultural features. During the study, it was planned to identify cultural stereotypes of another language, expand verbal and non-verbal techniques for learning a foreign language. It was also planned to resolve specific intercultural situations, expand student interaction in groups. It was established that this approach to learning had a positive effect on the development of language skills among students who used ClassVR in their studies (Group 1) (M = 45.3). The students in Group 2 who used ENGAGE technology in their learning had higher levels of social skills (M=47.2).

The learning process had a positive impact on students in Groups 1 and 2. The Students in Group 1 were able to develop language competence, critical thinking, and emotional expressiveness skills. For Group 2, the pronounced skills were clarity of cultural traditions, critical thinking, and flexibility of communication. Learning mechanisms allowed them to develop foreign language competence. However, for students in Group 1, intercultural communication competence could be better demonstrated when interacting with students from the group (M=47.2). For students in Group 2, it was better to demonstrate them when interacting with students from other countries (M=48.2).

The practical significance of the article is the use of ClassVR and ENGAGE to develop intercultural communication competence for EFL students. The research prospects may be comparing traditional and interactive methods for developing intercultural communicative competence.

The novelty of the study lies in the possibility of using an innovative approach to language learning, which is linked to a focus on intercultural competence. The emphasis is on a detailed study of intercultural competence, which is associated with the development of linguistic competence, critical thinking, emotional expressiveness, clarity of cultural strategies, and flexibility of communication. The research has a positive impact on the adaptation of the education system for specific groups of students. It contributes

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to a change in the traditional approach to education, 13, No. 1, which is in line with current globalisation processes. 10.3390/comput

Thus, the results of the study contribute to the supplementation of existing teaching strategies, focusing on the development of communication, emotional sensitivity, and the expansion of intercultural ties. In further studies, attention will be paid to expanding the prospects for using virtual technologies in student training to expand language competence.

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