# The effectiveness of the internationalization of the educational process as a way of developing intercultural competencies

**Alla Marushkevych[1], Iryna Zvarych[2], Serhii Melnychuk[3], Olga Zhurkova[4], Oksana Grynevych[5], Iryna Kryknitska[6]**

[1]Department of Pedagogy, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine
[2]Department of Foreign Philology and Translation, Kyiv National University of Trade and Economics, Kyiv, Ukraine
[3]Department of Theory and Practical Translation, Educational and Scientific Institute of Philology,
Taras Shevchenko National University of Kyiv, Kyiv, Ukraine
[4]Department of Foreign Philology and Translation, State University of Trade and Economics, Kyiv, Ukraine
[5]Certified English and French Teacher, Kyiv, Ukraine
[6]Department of Germanic and Romance Languages, Kyiv National Linguistic University, Kyiv, Ukraine

## Article Info

## ABSTRACT

Intercultural competence is recognised as a key element in the modern world, where openness to diversity contributes to effective international communication and deeper understanding, tolerance, and joint development in an intercultural environment. The aim of this study was to determine the impact of internationalisation of the educational process on the development of students' intercultural competencies. A diagnostic test of relations was used to diagnose the intensity of the ethnic stereotype. The intercultural competence was measured according to the adapted scale of Fantini and Tirmizi and the cultural intelligence scale (CQS). A questionnaire was developed to determine students' satisfaction with studying under the internationalisation programme. The obtained results ($U_{emp}=113<U_{cr}=127$) gave grounds to conclude that the internationalisation of the educational process positively affects the development of intercultural competencies. The experiment showed that students generally had a positive ethnic stereotype, and the internationalisation programme increased the growth of indicators of intercultural competence according to all criteria. The results show that students generally are highly satisfied with studying in exchange programmes. The prospect for further research is the study of the influence of intercultural communication on students' academic performance.

## Corresponding Author:

Iryna Zvarych
Department of Foreign Philology and Translation, Kyiv National University of Trade and Economics
Kyiv, Ukraine
Email: irynazvarych12@gmail.com

## 1. INTRODUCTION

The rapid development of international relations and global transformations that determine the modern globalised society urge the formation of a new generation of individuals with high intercultural competence. The learners' adaptation to various cultural contexts is significant because of the growth of international exchanges and intercultural interactions since the end of the 90's last century. Work in intercultural communication and international cooperation in higher education is the object of careful research by scholars who resort to different views and approaches to reveal different aspects of this issue. The advantages and challenges of intercultural interaction in the university environment are explored from theoretical concepts and the practical possibilities of implementing and supporting this process in educational

programmes [1]. Researchers such as [2], [3] demonstrate the relevance of real intercultural contacts for learning and indicate that institutional support and integration of intercultural learning into educational programmes can significantly enhance its impact. However, despite the significant number of studies on the effectiveness of intercultural practices, many aspects of this problem remain unexplored by the requirements of modern academic discourse. These gaps determine the relevance of further empirical research on the impact of the internationalisation of the educational process on the development of students' intercultural competencies. Therefore, the aim of this research is to study the impact of internationalisation of the educational process on the development of students' intercultural competencies. The aim involves the fulfilment of the following research objectives: i) carry out diagnostics to determine the intensity of the ethnic stereotype to study the students' attitude towards other nationalities; ii) compare the results of diagnosing students regarding their level of intercultural competence before and after studying with international students; and iii) assess the level of students' satisfaction with studying under the internationalisation programme.

## 2. LITERATURE REVIEW

The rapid development of international relations and global changes emphasise building intercultural communicative competence (ICC) as an important task in higher education. Defined by M. Byram and adopted by the Common European Framework of Reference for Languages (CEFR), ICC promotes the development of knowledge, skills and guidelines necessary for intercultural communication with representatives of different cultures [4]. The concept of intercultural communication was first defined by E. Hall and G. Trader in 1954 as the interaction of individuals with varying patterns of behaviour and experience [5]. The main idea is to move from a single-cultural focus to a bi-cultural comparison and establish a connection between culture and the communicative process. The development of intercultural competence is determined by the awareness of differences between cultures, the readiness to communicate, the ability to prevent conflicts, and the ability to build new models of behaviour [6]. Educational institutions currently face challenges in implementing an intercultural approach due to the difficulties associated with explaining the educational goals for ICC and creating teaching, learning, and assessment activities that support this development [7].

Intercultural competence is considered simultaneously: a range of issues in which a person should be knowledgeable; acquired experience, information resource, knowledge in a specific subject area; a socially ordered requirement to train specialists in a certain field [8], [9]. Intercultural communication skills are becoming necessary for international students in higher education institutions [10]. It includes knowledge and understanding of national and cultural differences and the ability to interact and cooperate in an intercultural environment [11]. This is especially important in the context of the internationalisation of educational programmes.

Various methods are used to develop intercultural competence. The results of the experiment conducted by Fakhrutdinov and Fahrutdinova [12] testify to the high effectiveness of the competence approach in building the intercultural competence of future journalists. The centre for intercultural communication opened by Pryshliak *et al.* [13] is a key resource for supporting intercultural understanding. Mehriniso and Siddiqova [14] emphasise the use of interactive computer-based learning for increasing the level of intercultural competence. Ciftci [15] notes the role of open social virtual environments in building intercultural competence. Liaw [16] and Dorobantu-Dina [17] confirm the importance of intercultural education in curricula. Redchenko [18] considers the application of case technologies as an interdisciplinary method. Mikhailova *et al.* [19] examines using information technology and virtual environments to develop intercultural competence. The experience of building intercultural competence through academic mobility is essential for our research. The work of Matei [20] shows that students view intercultural competence as key to successful international academic mobility internships. According to them, this competence helps them better understand, respect and adapt to the host culture's norms, traditions, and customs.

One of the main benefits of an international internship is the development of skills that improve the ability for future intercultural learning [20]. The researchers recognise the importance of intercultural competence in addressing knowledge gaps and ensuring internship effectiveness. Braslauskas [21] confirms that internships help improve students' intercultural competence through real cultural context and contact. A consistent review by Pietro [22] also emphasises that international internships contribute to developing interpersonal skills such as openness and self-confidence, which are key properties of intercultural competence. Studies also indicate gains in practical knowledge and language skills. Such experiences positively impact students, preparing them for the global labour market challenges.

Therefore, we understand the concept of "intercultural competence" as an integrative characteristic of a person who is able to successfully communicate with representatives of other cultures, which includes knowledge and understanding of national and cultural differences and traditions, a system of dominant

values, perception of habits, customs, attitudes, ensures readiness to understand, respect and use cultural stereotypes effectively, readiness for successful interaction and cooperation in an intercultural environment. All this indicates that ICC development should be a key factor in the internationalisation process of higher education institutions, deepening the understanding and effectiveness of student interaction in the international context.

## 3.    METHODS AND MATERIALS
### 3.1.  Research design
The research was conducted in several stages: preparatory, implementation stage, and analysis stage of the obtained results. The preparatory stage involved determining the theoretical prerequisites for creating an international educational environment. This stage provided for the search for student exchange programmes, the selection and conclusion of partnership agreements with universities with international experience, and meeting academic standards and common goals. The implementation stage (January 2023 to June 2023) involved conducting a pedagogical experiment based on experimental higher education institutions. Students participating in the exchange programme were selected and mobilised at this stage. Cultural events are organised to promote mutual understanding and support international communication between students of different nationalities. This stage provided input and output diagnostics of the development of intercultural competence. The analysis stage of the obtained results involved collecting and processing research data and their interpretation.

### 3.2.  Sample
The experiment was conducted at the following universities: Taras Shevchenko National University of Kyiv, Kyiv National University of Trade and Economics, State University of Trade and Economics, National University of Food Technologies and Kyiv National Linguistic University. The experimental studies involved a total of 379 students majoring in 035.041:Philology. Students of this major were chosen to avoid communication barriers. As of the beginning of the 2021/2022 academic year, 16,704 people studied in Ukraine at the first (bachelor) level for 035.041:Philology full time, which made up the general population of the sample (higher and professional pre-higher education in Ukraine in 2021: statistics, 2022). After calculating the size of the required (representative) sample using an online calculator (with parameters: confidence probability-95%, margin of error-5%), the size of the valid sample was 379 people. The sample was divided into 2 groups during the research: experimental ($n1=189$) and control ($n2=190$). The participants of the experimental group (EG) studied with foreign students who were enrolled on the exchange programme. The language of teaching was English. There were no changes in the organisation of the educational process in the control group (CG). A total of 37 foreign students studied in EGs under the exchange programme.

### 3.3.  Methods and instruments
The criteria, indicators, and levels of the students' intercultural competence were determined to assess its level shown in Table 1 (see in Appendix). Soldatov's diagnostic test of relations was used to diagnose and determine the intensity of the ethnic stereotype. We measured intercultural competence using the adapted scale of [23] and the cultural intelligence scale (CQS). A questionnaire with 5 closed questions was developed to determine students' satisfaction with studying under the internationalisation programme. The questionnaire was pre-validated according to the research objectives. The Mann-Whitney U test was used for statistical analysis and testing of hypotheses related to the students' level of intercultural competence.

## 4.    RESULTS AND DISCUSSION
We conducted diagnostics to determine the intensity of ethnic stereotypes to study students' attitudes towards other nationalities. This process involved a series of assessments and analyses, as detailed in Table 2, to quantify and understand the prevalence and nature of these stereotypes. The findings from this diagnostic procedure were crucial for gaining insights into how these attitudes might influence interactions among students of different nationalities.

The majority of students (60%) exhibited a medium level of positive ethnic stereotypes, while 15% and 1.6% of the sample displayed tendencies towards negative stereotyping. Table 2 illustrates that negative stereotypes are more pronounced towards the "typical" representative of the same nationality compared to the "ideal" representative, suggesting that participants are inclined to project the desirable traits of the "ideal" onto the "typical" representative of their nationality in Figure 1. This indicates a discrepancy between perceived and idealised national traits among the students.

Table 2. Determining of the ethnic stereotype intensity

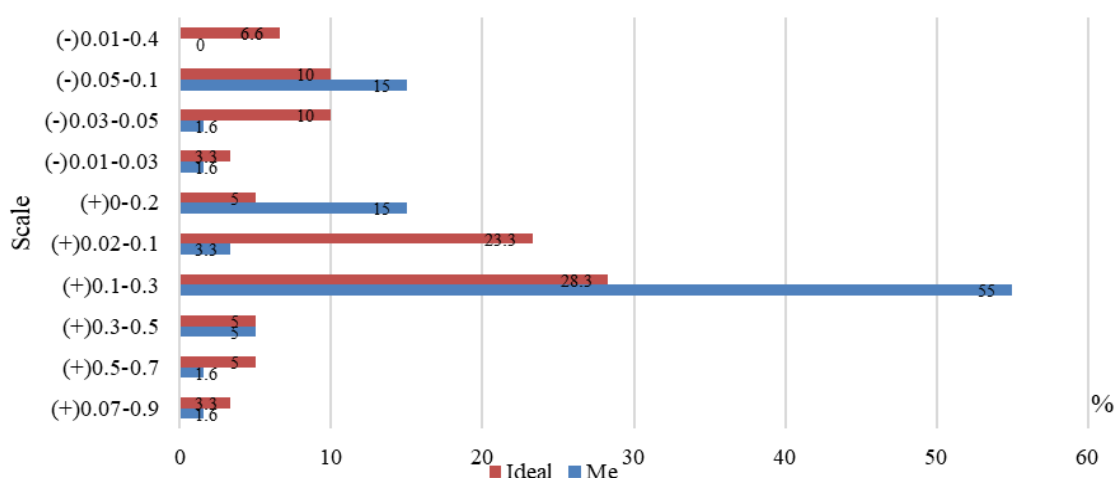| | Scales | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Positive ethnic stereotype (+) | | | | | | Negative ethnic stereotype (−) | | | |
| | 0.7—0.9 | 0.5—0.7 | 0.3—0.5 | 0.1—0.3 | 0.02—0.1 | 0—0.02 | 0.01—0.03 | 0.03—0.05 | 0.05—0.1 | 0.1—0.4 |
| **Me** | | | | | | | | | | |
| N | 1 | 1 | 3 | 33 | 2 | 9 | 1 | 1 | 9 | 0 |
| % | 1.6 | 1.6 | 5 | 55 | 3.3 | 15 | 1.6 | 1.6 | 15 | 0 |
| **Ideal** | | | | | | | | | | |
| N | 2 | 3 | 3 | 17 | 14 | 3 | 2 | 6 | 6 | 4 |
| % | 3.3 | 5 | 5 | 28.3 | 23.3 | 5 | 3.3 | 10 | 10 | 6.6 |
| **A "typical" representative of my nationality** | | | | | | | | | | |
| N | 2 | 1 | 3 | 30 | 2 | 3 | 2 | 3 | 10 | 4 |
| % | 3.3 | 5 | 5 | 28.3 | 23.3 | 5 | 3.3 | 10 | 10 | 6.6 |
| **A "typical" representative of another nationality** | | | | | | | | | | |
| N | 3 | 4 | 2 | 6 | 18 | 10 | 9 | 3 | 2 | 3 |
| % | 5 | 6.6 | 3.3 | 10 | 30 | 16.6 | 15 | 5 | 3.3 | 5 |



Figure 1. Dynamics of students' ethnic preferences according to the "Me" and "ideal" scales

High scores are predominantly observed on the "ideal" parameter, while scores on the "Me" parameter are nearly nonexistent, which may suggest a possible low self-esteem among the subjects. This disparity highlights a tendency for students to view the "ideal" representative of their nationality more favourably compared to their own self-perception. A comparison between the image of a typical representative of any nationality and the "ideal" further reveals students' ethnic preferences and perceptions in Figure 2.

Figure 2 shows that the students do not see their ideal in the "typical" representative of the other nationality. A high level of negative stereotype prevails among students of foreign ethnic environments, and a positive ethnic stereotype prevails in relation to the "ideal". So, comparing the "typical representative of the other nationality" and "ideal" parameters reveals the general attitude towards our nationality. The coefficients obtained for the image of "Me" and different ethnic groups were compared to analyse interethnic differentiation. So, it can be stated that students have a medium intensity of positive ethnic stereotypes regarding the image of "Me" and a high level regarding a "typical representative of the other nationality". In general, a positive stereotype currently prevails in relation to the image of "Me". So, we can talk about the high ethnic identity of the respondents. The results obtained from the input diagnostics of the level of intercultural competence were summarised for EG and CG, translated into a percentage ratio and presented in Table 3.

The study of the cognitive criterion of intercultural competence through the selected methods showed that in the CG of students with a high level of development, the cognitive component of intercultural competence was diagnosed in 15.5% of people, the medium was found in 36.2%, and 48.2% of the respondents showed a low level. In the EG, a high rate was found in 22% of respondents, a medium rate in 33.1%, and a low rate in 44.9% of respondents. Diagnostics of the axiological criterion of intercultural competence showed that more than half of the respondents in the CG (56.1%) had a low level of knowledge of the value system of their fellow students from another country. A total of 30.3% of students in CG have a medium, and 13.6% a low level of the axiological criterion of intercultural competence. In EG, 49.3% of respondents have a low level of the studied criterion, 32.0% of students have a medium level, and 19.7% have a high level. Diagnostics of the personality operational criterion made it possible to identify the

following levels of development in CG: low level (51.9%), medium (33.8%), high (14.3%). In EG, these indicators are as follows: 48.3% of respondents have a low level, 32.0% have a medium level, and 19.7% have a low level.
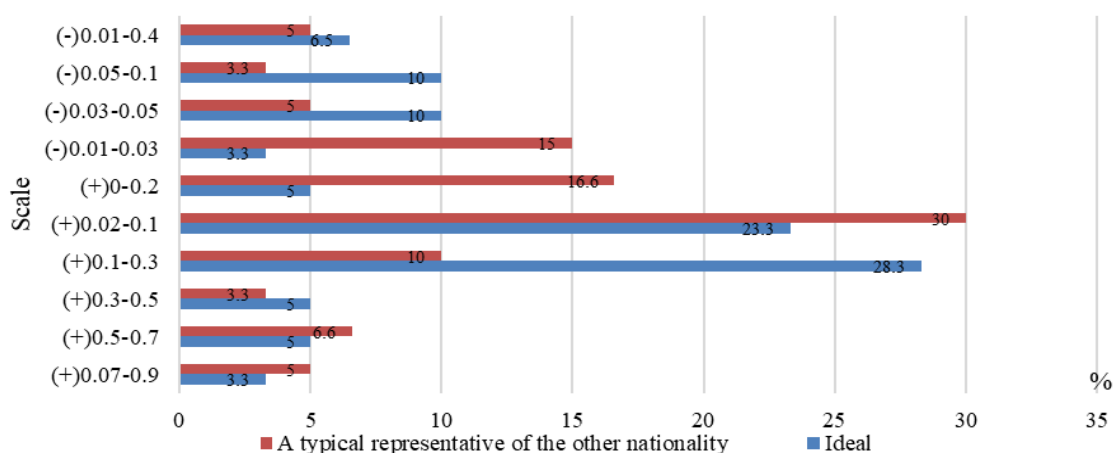


Figure 2. The dynamics of students' ethnic preferences according to the "typical representatives of the other nationality" and "ideal" scales

Table 3. The results of the assessment of the input level of students' intercultural competence

| Criteria | CG | | | EG | | |
|---|---|---|---|---|---|---|
| | Low level (%) | Medium level (%) | High level (%) | Low level (%) | Medium level (%) | High level (%) |
| Cognitive | 48.3 | 36.2 | 15.5 | 44.9 | 33.1 | 22.0 |
| Axiological | 56.1 | 30.3 | 13.6 | 48.3 | 32.0 | 19.7 |
| Personality operational | 51.9 | 33.8 | 14.3 | 46.6 | 36.2 | 17.2 |
| Reflective | 57.5 | 32.4 | 10.1 | 56.2 | 28.7 | 15.1 |

Having studied the level of the reflective criterion, we established the predominance of a low level of this component in CG (57.5%) and in EG (56.2). Indicators of the medium level in CG make up 32.4% of respondents, in EG 28.7%. A low level is characteristic of 10.1% of respondents in CG and 15.1% of respondents in EG. The initial diagnostics showed that students of both groups (control and experimental) demonstrate the highest level of the cognitive component of intercultural competence, knowledge and understanding of the phenomena and values of other cultures, their comparison with their own system of value dominants, while axiological, personality operational and reflective criteria of intercultural competence are less developed. The exchange between the students was followed by the initial diagnostics of the students' intercultural competence.

Table 4 shows that the number of students with a low level of intercultural competence has decreased in the EG: cognitive criterion from 44.9 to 19.9%; axiological from 48.3 to 28.8%; personality operational from 46.6 to 22.7%; reflective from 56.2 to 30.4%. The number of students with a high level increased: from 22.0 to 40.7%; from 19.7 to 34.8%; from 17.2 to 39.1%; from 15 to 32%, respectively. It should be noted that the number of students with a medium level also increased from 33.1 to 39.4% (cognitive criterion); from 32.0 to 36.4% (axiological criterion); from 36.2 to 38.2% (personality operational criterion); from 28.7 to 37.6% (reflective criterion of intercultural competence).

Table 4. The dynamics of the criteria of students' intercultural competence (%)

| Criteria | CG | | | | | | EG | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Low level | | Medium level | | High level | | Low level | | Medium level | | High level | |
| | before | after | before | after | before | after | before | after | before | after | before | after |
| Cognitive | 48.3 | 43.2 | 36.2 | 36.3 | 15.5 | 20.5 | 44.9 | 19.9 | 33.1 | 39.4 | 22 | 40.7 |
| Axiological | 56.1 | 44.2 | 30.3 | 35.1 | 13.6 | 20.7 | 48.3 | 28.8 | 32.0 | 36.4 | 19.7 | 34.8 |
| Personality operational | 51.9 | 47.9 | 33.8 | 36.1 | 14.3 | 16 | 46.6 | 22.7 | 36.2 | 38.2 | 17.2 | 39.1 |
| Reflective | 57.5 | 53.9 | 32.4 | 27.7 | 10.1 | 18.4 | 56.2 | 30.4 | 28.7 | 37.6 | 15.1 | 32 |

The 2 unrelated samples were obtained in the pedagogical experiment (characteristics of the control and EGs and the nature of the assessment is non-parametric), the Mann-Whitney U test was used to test the hypothesis, which is a non-parametric analogue of the student's test for unrelated (odd) samples that meet the following conditions: quantitative or ordinal characteristic; no test for normality of distribution is required; independence of compared samples; 2 comparison groups. This gives grounds for advancing a hypothesis: i) null hypothesis ($H_0$): there is no statistically significant difference in the levels of intercultural competence between students who participated in the internationalisation programme and those who received traditional education, and ii) alternative hypothesis ($H_1$): students who participated in an internationalisation programme have a higher level of intercultural competence compared to those who received traditional education.

The calculation of non-parametric criteria is based on ranking. We will rank the results of testing the value of the variable (the level of the students' intercultural competence criteria) in ascending (or descending) order, regardless of belonging to the group (CG or EG), assigning a lower rank to a lower value in ascending order. At the same time, 10 people were selected from the control and EGs, who showed the highest levels of intercultural competence. So, the evaluated variable is integrated (total value of positive answers to test questions for all levels) in Table 5.

Table 5. Ranking of research results

| Item no. | Test results | Group | CG rank | EG rank |
|---|---|---|---|---|
| 1 | 42 | CG | 1 | |
| 2 | 46 | CG | 2 | |
| 3 | 47 | CG | 3 | |
| 4 | 49 | CG | 4 | |
| 5 | 49 | CG | 5 | |
| 6 | 49 | EG | | 6 |
| 7 | 52 | CG | 7 | |
| 8 | 52 | EG | | 8 |
| 9 | 55 | CG | 9 | |
| 10 | 55 | EG | | 10 |
| 11 | 57 | EG | | 11 |
| 12 | 58 | CG | 12 | |
| 13 | 58 | EG | | 13 |
| 14 | 59 | CG | 14 | |
| 15 | 61 | CG | 15 | |
| 16 | 64 | CG | 16 | |
| 17 | 64 | EG | | 17 |
| 18 | 65 | CG | 18 | |
| 19 | 65 | CG | 19 | |
| 20 | 68 | EG | | 20 |
| 21 | 69 | CG | 21 | |
| 22 | 72 | CG | 22 | |
| 23 | 72 | EG | | 23 |
| 24 | 74 | EG | | 24 |
| 25 | 74 | EG | | 25 |
| 26 | 76 | EG | | 26 |
| 27 | 77 | EG | | 27 |
| 28 | 78 | CG | 28 | |
| 29 | 79 | EG | | 29 |
| 30 | 81 | CG | 30 | |
| 31 | 84 | CG | 31 | |
| 32 | 86 | CG | 32 | |
| 33 | 87 | EG | | 33 |
| 34 | 90 | CG | 34 | |
| 35 | 90 | EG | | 35 |
| 36 | 92 | EG | | 36 |
| 37 | 92 | EG | | 37 |
| 38 | 94 | EG | | 38 |
| 39 | 95 | EG | | 39 |
| 40 | 95 | EG | | 40 |
| | Total | | 323 | 497 |

The statistical analysis results indicate statistically significant differences in the levels of intercultural competence components between the CG and EG students. Using the 2-sample Wilcoxon test, the value $z=2.35$ ($p<0.05$) was obtained, and the Mann-Whitney test confirmed the statistical significance of the differences ($U_{emp}=113<U_{cr}=127$). So, hypothesis $H_0$ about the absence of differences in the levels of intercultural competence is rejected. To assess the level of satisfaction with intercultural exchange of students, a survey was conducted after the experiment shown in Table 6. Analysis of the questionnaire survey results gives grounds to

draw the following conclusions: most students (78.5%) are satisfied or very satisfied with participation in the internationalisation programme. Most participants (75.7%) are convinced that participation in the programme can improve their knowledge, skills, and proficiency in foreign languages. About half of the students (41.6%) encountered difficulties during the intercultural exchange, but it is difficult to say whether these were systematic problems. A significant number of students (43.1%) noted positive changes in their attitude towards representatives of other nations, which also confirms the initial and final diagnostics results.

The diagnostics of determining the intensity of the ethnic stereotype indicated that students show a medium level of positive ethnic stereotype, particularly regarding the image of "Me". This means that most respondents have a positive attitude towards their ethnic identity. It is noted that students show a greater positive stereotype about the "ideal" image, which may indicate a desire to see idealised features in a representative of their nationality.

As for the "typical representative of my nationality" parameter, a more pronounced negative attitude was revealed compared to "ideal", which may indicate a tendency to perceive representatives of one's nationality less positively. Regarding the "typical representative of the other nationality", students demonstrate a significant negative stereotype. This may indicate a tendency to stereotype other ethnic groups, especially when comparing them to one's ideal [24]. Salih and Omar [25] point out that the purposeful inclusion of experiential learning principles in the design and implementation of internship programmes abroad has obvious potential to increase participants' intercultural competence. The statistical analysis results indicate statistically significant differences in the intercultural competence components between the CG and EG students before and after the experimental study. The research results Snodgrass et al. [26] also showed a significant increase in the participants' cultural intelligence after participating in an internship programme. Studies by authors [12], [27] emphasised the importance of online academic internationalisation and the inclusion of intercultural competence in English as a second language (ESL)/English as a foreign language (EFL) curricula [28]. Starr et al. [29] note that the stay abroad improved the participants' intercultural competence proportionally to the duration of their stay. We did not conduct such an observation.

In our study, the number of students in the EG with a low level of intercultural competence became significantly smaller from 44.9% to 19.9%. A study by Starr et al. [29] also found effects on cognitive intercultural competence. In general, after the experimental work, there were changes in all criteria of intercultural competence. The research by San and Htwe [30] found that studying abroad affects students' attitudes toward their home culture, host culture, and cultural differences, as well as their intercultural interactions.

Table 6. Evaluation of the level of satisfaction with intercultural exchange of students after the experiment

| Item no. | Question | Answers (%) |
|---|---|---|
| 1. | Rate your level of satisfaction with participation in the internationalisation programme. | |
| | Very satisfied | 37.4 |
| | Satisfied | 41.1 |
| | Partially satisfied | 16.5 |
| | Dissatisfied | 4.3 |
| | Very dissatisfied | 0.7 |
| 2. | Has participation in the internationalisation programme improved your knowledge, skills, and level of foreign language proficiency? | |
| | Yes | 75.7 |
| | No | 24.3 |
| 3. | Did you have any difficulties during intercultural exchange? | |
| | Yes, often | 15.9 |
| | Yes, sometimes | 25.7 |
| | No, never | 38.1 |
| | Difficult to say | 20.3 |
| 4. | Has your attitude towards representatives of other nations changed after participating in the exchange programme? | |
| | Yes, in a positive way | 43.1 |
| | Yes, in a negative way | 2.7 |
| | No, it hasn't changed | 35.8 |
| 5. | To what extent did intercultural exchange contribute to increasing the level of mutual understanding in the group? | |
| | Very much | 12.1 |
| | Contributed | 24.3 |
| | Partly contributed | 34.3 |
| | Weakly contributed | 21.8 |
| | Not even a little | 7.5 |

## 5. CONCLUSION

Intercultural communication is a complex and integral element of our modern world. One of the key features of intercultural communication is that it involves individuals with different languages, values, and

perceptions of the world. Such diversity can lead to misunderstandings and conflicts. Therefore, developing intercultural competence becomes an urgent task for those who want to be competitive in the international environment. Our research confirmed that the internationalisation programme contributes to student satisfaction, improved knowledge and skills, and mutual understanding in an intercultural environment. People become more tolerant communicating with other nationalities, learn new information about other people's culture, traditions, and life. The study results can serve as a basis for developing intercultural education programmes and courses aimed at reducing negative ethnic stereotypes and improving the students' intercultural competence. The conducted research is relevant for heads of educational institutions, guarantors of educational programmes, employees of the international department with the aim of internationalising the educational process. We see the prospects for further research in the study of the impact of intercultural communication on the students' academic performance. It is also important to research modern technologies such as virtual platforms and online resources that can improve intercultural communication between students.

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This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

| Name of Author | C | M | So | Va | Fo | I | R | D | O | E | Vi | Su | P | Fu |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alla Marushkevych | ✓ | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | ✓ |  |  | ✓ |  |
| Iryna Zvarych |  | ✓ |  |  |  | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ |  |  |
| Serhii Melnychuk |  | ✓ | ✓ |  |  | ✓ |  | ✓ |  | ✓ | ✓ | ✓ |  |  |
| Olga Zhurkova | ✓ |  |  | ✓ |  |  |  |  | ✓ |  |  |  |  |  |
| Oksana Grynevych |  | ✓ |  | ✓ |  | ✓ |  | ✓ | ✓ |  |  | ✓ |  |  |
| Iryna Kryknitska | ✓ |  | ✓ | ✓ |  |  | ✓ |  |  | ✓ | ✓ |  | ✓ |  |

| | | | | | | |
|---|---|---|---|---|---|---|
| C | : | **C**onceptualization | I | : | **I**nvestigation | Vi : **Vi**sualization |
| M | : | **M**ethodology | R | : | **R**esources | Su : **Su**pervision |
| So | : | **So**ftware | D | : | **D**ata Curation | P : **P**roject administration |
| Va | : | **Va**lidation | O | : | Writing - **O**riginal Draft | Fu : **Fu**nding acquisition |
| Fo | : | **Fo**rmal analysis | E | : | Writing - Review & **E**diting | |

## CONFLICT OF INTEREST STATEMENT
Authors state no conflict of interest.

## INFORMED CONSENT
We have obtained informed consent from all individuals included in this study.

## ETHICAL APPROVAL
The respondents' participation in the study was entirely voluntary, and throughout the data collection process, we strictly adhered to the principles of protecting participants' rights, ensuring their safety, and maintaining the confidentiality of their data. We took comprehensive measures to uphold these standards to ensure a secure and ethical research environment. Additionally, the research was conducted with a commitment to impartiality and objectivity, ensuring that the findings were credible and unbiased.

## DATA AVAILABILITY
Due to confidentiality and privacy agreements with the participants, the datasets during the current study are not accessible to the general public. However, upon reasonable request, the corresponding author may provide derived data that supports the study's findings. Data access requests will be evaluated in

accordance with participant privacy and ethical approval. The data that support the findings of this study are available from the corresponding author, [IZ], upon reasonable request.

## REFERENCES

[1]   H. E. Messelink, J. van Maele, and H. Spencer-Oatey, "Intercultural competencies: what students in study and placement mobility should be learning," *Intercultural Education*, vol. 26, no. 1, pp. 62–72, 2015, doi: 10.1080/14675986.2015.993555.

[2]   D. K. Deardorff, *Manual for developing intercultural competencies: story circles*. London: Routledge, 2020, doi: 10.4324/9780429244612.

[3]   N. Mykytenko, M. Fedorchuk, O. Ivasyuta, N. Hrynya, and A. Kotlovskyi, "Intercultural communicative competence development in journalism students," *Advanced Education*, vol. 9, no. 20, pp. 121–131, 2022, doi: 10.20535/2410-8286.261521.

[4]   L. M. Fernandez, "An approach to the development of the intercultural competence through literature in an EFL classroom of Secondary Education," M.S. thesis, Universidad de Valladolid, Valladolid, Spain, 2019.

[5]   E. T. Hall, *Beyond Culture*. New York: Anchor Books, 1989.

[6]   L. Mukharlyamova, N. Konopleva, I. Galimzyanova, and I. Berezhnaya, "Formation of the intercultural communicative competence of students in process of learning foreign languages," *Journal of History Culture and Art Research*, vol. 7, no. 4, pp. 230–236, Nov. 2018, doi: 10.7596/taksad.v7i4.1840.

[7]   J. Gulikers, D. Brinkman, and P. Runhaar, "Using a rubric to grasp intercultural competence development in vocational education," *Journal of Vocational Education and Training*, vol. 73, no. 1, pp. 47–70, 2021, doi: 10.1080/13636820.2019.1688854.

[8]   O. Bartosh, "Intercultural competence as a part of professional qualities," *LOGOS-A Journal of Religion, Philosophy, Comparative Cultural Studies and Art*, no. 104, pp. 148–155, 2020, doi: 10.24101/logos.2020.59.

[9]   V. Zagorodnova, N. Panova, I. Cherezova, I. Glazkova, and V. Nischeta, "The intercultural communication as a tool of multilingual personality formation in modern educational space of Ukraine," *Journal of History Culture and Art Research*, vol. 8, no. 1, pp. 55–66, 2019, doi: 10.7596/taksad.v8i1.2007.

[10]  M. N. Razdobarova, L. M. Ivanova, E. B. Kalinichenko, and A. V. Lanina, "Experimental research of the formation of intercultural communicative competence among students," in *European proceedings of Social and Behavioural Sciences*, pp. 1127–1134, 2019, doi: 10.15405/epsbs.2019.03.02.127.

[11]  A. E. Fantini, "Reconceptualizing intercultural communicative competence: a multinational perspective," *Research in Comparative and International Education*, vol. 15, no. 1, pp. 52–61, Mar. 2020, doi: 10.1177/1745499920901948.

[12]  R. R. Fakhrutdinov and R. A. Fahrutdinova, "The formation of intercultural competence among the students in the process teaching english," *Amazonia Investiga*, vol. 7, no. 13, pp. 209–214, 2017.

[13]  O. Pryshliak, V. Polishchuk, and N. Lupak, "Impact of intercultural educational space on the formation of intercultural competence of future teachers at a pedagogical higher education institution," *Acta Paedagogica Vilnensia*, vol. 45, pp. 42–59, 2020, doi: 10.15388/ActPaed.45.3.

[14]  N. Mehriniso and N. N. Siddiqova, "Using interactive methods for the formation of intercultural communication in English language classes," *The theory of recent scientific research in the field of pedagogy*, vol. 1, no. 5, pp. 10–14, 2023.

[15]  E. Y. Ciftci, "A review of research on intercultural learning through computer-based digital technologies," *Educational Technology and Society*, vol. 19, no. 2, pp. 313–327, 2016.

[16]  M. L. Liaw, "EFL learners' intercultural communication in an open social virtual environment," *Educational Technology and Society*, vol. 22, no. 2, pp. 38–55, 2019.

[17]  R. Dorobanțu-Dina, "Intercultural competence-way to solve the problems of today's world," *Eastern European Journal for Regional Studies (EEJRS)*, vol. 7, no. 2, pp. 142–164, 2021.

[18]  N. N. Redchenko, "Interdisciplinary learning as a basis for formation of intercultural communicative competence," *International Journal of Environmental and Science Education*, vol. 11, no. 13, pp. 6195–6202, 2016.

[19]  T. Mikhailova, K. Duisekova, F. Orazakynkyzy, G. Beysembaeva, and S. Issabekova, "The evaluation of intercultural professional technology-based communicative competence formation for students," *World Journal on Educational Technology: Current Issues*, vol. 13, no. 2, pp. 272–287, 2021, doi: 10.18844/wjet.v13i2.5700.

[20]  F.-L. Matei, "The Importance of intercultural competence in the context of academic mobility. Training needs," *International Journal of Social and Educational Innovation (IJSEIro)*, vol. 8, no. 15, pp. 38-52, 2020.

[21]  J. Braslauskas, "Developing intercultural competences and creativity: the foundation for successful intercultural communication," *Creativity Studies*, vol. 14, no. 1, pp. 197–217, 2021, doi: 10.3846/cs.2021.14583.

[22]  G. di Pietro, "International internships and skill development: a systematic review," *Review of Education*, vol. 10, no. 2, p. e3363, 2022, doi: 10.1002/rev3.3363.

[23]  A. E. Fantini and A. Tirmizi, "Exploring and assessing intercultural competence," World Learning Publications, 2006.

[24]  S. M. Akpovo, N. Baldwin, and S. Belbase, "The development of intercultural sensitivity and cultural empathy during an international student-teaching internship in Nepal," in *Critical Issues in Early Childhood Teacher Education: Volume 2-International Perspectives*, I. Jones and M. Lin, Eds., Charlotte, NC: Information Age Publishing, 2020, pp. 147–166.

[25]  A. A. Salih and L. I. Omar, "Globalized English and users' intercultural awareness: implications for internationalization of higher education," *Citizenship, Social and Economics Education*, vol. 20, no. 3, pp. 181–196, 2021, doi: 10.1177/20471734211037660.

[26]  L. L. Snodgrass, M. Hass, and M. Ghahremani, "Developing cultural intelligence: experiential interactions in an international internship program," *Journal of Global Education and Research*, vol. 5, no. 2, pp. 165–174, 2021, doi: 10.5038/2577-509x.5.2.1078.

[27]  D. M. Moss, C. A. Barry, and H. MacCleoud, "Promoting intercultural learning through an international teaching internship program," in *Inquiries Into Literacy Learning and Cultural Competencies in a World of Borders*, T. Huber and P. S. Roberson, Eds., Charlotte, NC: Information Age Publishing, 2018, pp. 199–217.

[28]  State Statistics Service of Ukraine, "Higher and professional pre-higher education in Ukraine in 2021: statistical information," (in Ukrainian), 2022. [Online]. Available: https://ukrstat.gov.ua/operativ/operativ2021/osv/vush_osv/arh_vuz_20_u.html

[29]  L. Starr, K. Yngve, and L. Jin, "Intercultural competence outcomes of a STEM living–learning community," *International Journal of STEM Education*, vol. 9, no. 1, pp. 1–15, 2022, doi: 10.1186/s40594-022-00347-x.

[30]  C. K. San and K. M. Htwe, "Exploring the impact of study abroad on students' intercultural competence: the case of Myanmar," *Journal of Comparative & International Higher Education*, vol. 15, no. 3, pp. 81–97, 2023, doi: 10.32674/jcihe.v15i3.4419.

**APPENDIX**

Table 1. Criteria, indicators, and levels of students' intercultural competence

| Criterion | Indicators | Level | | |
|---|---|---|---|---|
| | | Low | Medium | High |
| Cognitive | Knowledge and direct understanding of the phenomena and value of other cultures, actively comparing them with one's own worldview and cultural experience. | Can use ready information on intercultural interaction specially adapted for educational purposes. | The developed skill of acquiring knowledge about the culture and peculiarities of one's own and foreign countries. Intercultural interaction skills are developed, but there is discomfort in non-standard situations. | Has full knowledge of the cultural features of a foreign country is able to actively use them in intercultural dialogue. |
| Axiological | Knowledge of dominant values of other national cultures and understanding the value basis of national beliefs and traditions. | Have an idea of the value system of another culture but cannot use it in intercultural interaction. | The system of cultural values is learned but adapted to solve specific tasks of multicultural communication. | The ability to freely accept and share the cultural values of a representative of a foreign culture. |
| Personality operational | The ability to interact with representatives of other cultures in situations of intercultural understanding and knowledge, the ability to model situations, as well as operations and actions related to mastering the culture of critical thinking, the ability to cooperate with representatives of other cultures. | Lack of an established stable system of interaction with representatives of other cultures in situations of intercultural mutual understanding and knowledge. | The interaction system with representatives of other cultures in situations of intercultural mutual understanding and knowledge is partially developed. | Fully developed interaction system with representatives of other cultures in situations of intercultural mutual understanding and knowledge. |
| Reflective | The ability to evaluate one's activity and the interlocutor's activity and the ability to reflect and adequately self-evaluate. | The ability to evaluate one's own activity and the interlocutor's activity under predetermined conditions of intercultural interaction. | The ability to evaluate the process of intercultural communication considering the ethnic characteristics of the interlocutor. | Full mastery of the skills of reflective behaviour in the implementation of intercultural competence. |

**BIOGRAPHIES OF AUTHORS**

**Alla Marushkevych** is a doctor of science (pedagogics), professor, head of Department of Pedagogy, Faculty of Psychology, Taras Shevchenko National University of Kyiv. Research interests: development of education, scientific and pedagogical thought in Ukraine and abroad; evaluation of the work of scientific and pedagogical personnel in Ukraine and different countries in the world; ensuring the quality of education higher education institutions; personal experience of scientific and pedagogical activities of prominent figures in the field of education. She can be contacted at email: marushkevych2213.alla@gmail.com.

**Iryna Zvarych** is a doctor of pedagogical science, professor, professor of Department of Foreign Philology and Translation, Faculty of Trade and Marketing, Kyiv State University of Trade and Economics. Research interests: problems of teachers' assessment and students' assessment at universities of Ukraine and the USA, comparative pedagogy, in particular pedagogical forecasting and vocational education, monitoring of the education quality, modern methods of teaching foreign languages with using the advanced technologies, intercultural communication, multi-media technologies, online education. She can be contacted at email: irynazvarych12@gmail.com.

**Serhii Melnychuk** is a lecturer Department of Theory and Practical Translation at Educational and Scientific Institute of Philology. Research interests: diminutives in English and Ukrainian, phonetical system of English, self-education in technical terminology of English and Ukrainian. He can be contacted at email: ms_recstudio@ukr.net.

**Olga Zhurkova** is a candidate of PhD, associate professor of the Department of Foreign Philology and Translation in State University of Trade and Economics. Research interests: comparative, contrastive and communicative linguistics, lexical semantics, stylistics, the theory of nomination, pragmalinguistics, psycholinguistics, nonverbal semiotics, and linguaculture. She can be contacted at email: zsz.olga@gmail.com.
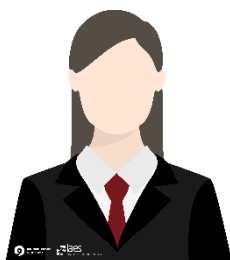
**Oksana Grynevych** is a certified English and French teacher. Research interests: innovative methods in teaching foreign languages, intercultural communication, psycholinguistics, personal and professional development. She can be contacted at email: grynox2000@gmail.com.

**Iryna Kryknitska** is a candidate of phylological sciences, associate professor of the Department of Germanic and Romance Languages in Kyiv National Linguistic University. Current research interests include: English phraseology, cultural studies, cognitive studies, discourse analysis, teacher's professional self-development and self-education. She can be contacted at email: iryna.kryknitska@knlu.edu.ua.