

# Problems of adaptation of foreign applicants to study in the educational program "Automotive Engineering"

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**Annotation. Problem.** The issue of student adaptation to studying at higher education institutions in Ukraine is extremely relevant, especially in the context of globalization, the active internationalization of the educational space, and the continuous increase in the number of international students choosing Ukraine for their higher education. Adaptation is a complex, multifactorial process that includes not only academic but also social, psychological, and cultural components, all of which are closely interrelated and mutually influential. Particular attention should be given to the effective integration of international students into the learning environment of Ukraine's technical universities, where the educational process is characterized by a high level of intellectual demand, specialized terminology, and the need for advanced analytical skills. At the same time, it is noted that the academic community has paid insufficient attention to the impact of cultural distance on the adaptation process. The article emphasizes the importance of a thorough analysis of the adaptation process in the context of cultural differences, as the cultural distance between a student's country of origin and the Ukrainian cultural environment can significantly influence the speed, effectiveness, and completeness of their integration into the academic and social setting of the university. **Purpose.** To determine the level of adaptation of international students enrolled in the "Automotive Engineering" program depending on cultural distance and to identify factors that facilitate or hinder this process. **Methodology.** The study involved 60 international students from Turkmenistan, Azerbaijan, Morocco, Tunisia, Cameroon, and Nigeria. The research methods included surveys (including the International Student Adaptation Scale), observations, interviews, and analysis of academic performance and extracurricular participation. The data were analyzed using both quantitative (mean, variance, correlations) and qualitative methods. **Results.** It was found that students from culturally closer regions (Group 1) were the most adapted, while those from countries with greater cultural distance (Group 3) experienced significant difficulties. The main barriers were language challenges, culture shock, differences in academic expectations, and psychological pressure. **Practical value.** The study developed recommendations to improve language training, cultural integration, and academic support, which can be implemented by higher education institutions to ensure more effective adaptation of international students and reduce academic attrition rates.

**Key words:** foreign applicants, adaptation, culture shock, language barrier, cultural distance, motivation.

## Introduction

Among the existing approaches to domestic scientific research on adaptation issues, specialists from various fields of knowledge are involved, including educators, sociologists, psychologists, psychophysicists, and philosophers. Such a multifaceted interest in the study of adaptation problems in general, as well

as the adaptation of foreign students in Ukraine, has emerged not by chance at the current stage of societal development. The shift towards euro-integrative educational methods and the demand for Ukrainian education on the international educational services market require additional and more in-depth examination of the adaptation issues of foreign nationals. This is not only a

matter of academic success, but also of social integration, psychological readiness for new learning conditions, and cultural interaction.

Unfortunately, the number of foreign students in Ukraine has significantly decreased in the current realities of today's society. The reasons for this include various political, economic, and social factors, including global instability and restrictions related to international conflicts. However, history shows that in the future, this situation is likely to change, and the number of foreign students will rapidly increase. Given this, the issue of adapting foreign students in Ukraine is becoming increasingly relevant and requires serious scientific and practical attention.

While there is growing interest in this topic, it is important to note that domestic and foreign experts still pay insufficient attention to the issues of adapting foreigners to studies in Ukraine, particularly concerning the factor of cultural distance. Studying this aspect of adaptation is extremely important, as cultural differences between countries can significantly impact the speed and effectiveness of adaptation, as well as the social, psychological, and academic challenges that foreign students face. Therefore, in the future, research on cultural barriers should be significantly intensified, and effective methods should be developed to facilitate the adaptation of foreigners in Ukraine in the context of their studies.

Thus, comprehensive study of this issue will not only improve the quality of the educational process but also contribute to the further development of international educational cooperation between Ukraine and other countries, which, in turn, will open new opportunities for the development of national education and science as a whole.

### Analysis of publications

In the context of Ukraine's integration into the European scientific and cultural-educational system, the issue of training competitive professionals through the high-quality professional preparation of students becomes increasingly relevant. In this regard, the study of the problem of adaptation of higher education students has become particularly pressing. The issue of personal adaptation has been widely addressed in the works of researchers. General concepts of adaptation, its patterns, and physiological mechanisms have been studied by Gerstmann P., Hinner M., Shih

M.Y., Nadine Binder [1–4, 6, 7]. Among domestic researchers of student and young professional adaptation, as well as the problem of adaptation as a form of social activity, the works of Bykov V.Yu., Spivakovskiy O.V., Kosozubivska I.V., and Pishchulina V.S. should be particularly noted [5, 6].

General issues of socio-psychological adaptation and the formation and development of adaptive characteristics of personality are reflected in the scientific works of Pinchuk I.M., Feshenko L.V., Mykhailenko I.M., Martynenko O.S., Zoria I.I., Tsybko O.V., Herasymova I.V., and Kovalenko O.O. [7–12]. The role of psychophysiological regulation mechanisms in supporting adaptive processes has been studied by Skyba N.V., Ivanenko O.M., Zhuravliova V.M., Babintseva L.V., and Tsybaliuk I.S. [13–16].

Foreign students, regardless of their country of origin, may encounter a number of interrelated problems when moving to another country. Upon entering university, foreign students may first face challenges of academic adaptation, particularly related to entering a new linguistic environment. For example, they may lack the necessary language proficiency to fully understand academic information while studying their subjects [15].

The second issue that foreign students in Ukraine may face is the difference in forms and requirements of education, as well as norms and methods of pedagogical interaction in the new educational environment.

The third challenge for students studying at Ukrainian universities is psychological adaptation to the new educational conditions and overcoming "culture shock" [16], or "cultural stress" [10], that is, problems of sociocultural adaptation. According to many researchers, culture shock manifests as cultural fatigue, when the influence of an "alien" culture causes emotional distress that can lead to mental health disturbances [10].

Most foreigners who find themselves in a different culture experience such a shock, regardless of their reasons for moving to a new country. The term "culture shock" was introduced into scientific discourse by American researcher Kalervo Oberg. In his view, culture shock is "the result of anxiety that arises from losing all familiar signs and symbols of social interaction"; moreover, when entering a new culture, individuals experience rather unpleasant emotions [8].

### Purpose and objectives

The aim of the study is to determine the level of adaptation of international students enrolled in the "Automotive Engineering" educational program, depending on cultural distance.

In accordance with this aim, the following objectives were formulated:

- to conduct a theoretical analysis of the issue of adaptation of international students to academic learning;
- to identify the specific features of adaptation among first-year international students;
- to examine the dynamics of adaptation of international students during their first year of study at Ukrainian higher education institutions;
- to develop recommendations for overcoming the challenges of adaptation to academic activities faced by international students in Ukrainian universities.

### Determining the level of adaptation of foreign applicants to the educational program "Automotive Engineering" depending on cultural distance

The object of this study is the level of adaptation of international students enrolled in the "Automotive Engineering" educational program.

The adaptation of international students to the educational environment is a crucial component of their academic success and integration into a new cultural and educational reality. Pedagogical challenges that arise during this process can influence students' academic performance, social integration, and psychological well-being. This issue is becoming especially relevant in the context of the globalization of education, as student mobility between countries continues to increase.

The study involved 60 first-year international students. The first group included students from Turkmenistan and Azerbaijan, the second group—from Morocco and Tunisia, and the third group—from Cameroon and Nigeria. Each group consisted of 20 students.

During the study, the following levels of adaptation were identified across several key dimensions:

Academic adaptation (academic performance, understanding of the educational process, interaction with teachers),

Sociocultural adaptation (integration into the host country's culture, participation in extracurricular activities),

Psycho-emotional adaptation (stress level, emotional well-being, homesickness),

Daily-life adaptation (living conditions, nutrition, financial support),

Language adaptation (proficiency in the language of the host country).

To assess adaptation levels, the following diagnostic tools were used: questionnaires (including custom-designed Likert scale items from 1 to 5 and adapted versions of the International Student Adaptation Scale), observation, analysis of academic performance (grades, attendance, requests for academic support), and analysis of participation in extracurricular activities and interactions with other students.

To gain a deeper understanding of the adaptation challenges, interviews with international students were conducted. The method of comparison and interpretation allowed for comparisons between students based on their country of origin, academic success, and with local students. The evaluation of results included both quantitative data, analyzed using statistical methods (mean, variance, correlations), and qualitative data, which were coded according to themes corresponding to the aforementioned adaptation aspects.

As a result of the research, factors influencing successful or unsuccessful adaptation were identified, and recommendations were developed to improve the level of student adaptation.

### Identification of factors that reduce the level of adaptation of foreign applicants

**Language Barrier.** One of the main challenges of adaptation is the language barrier. Students who do not have a sufficient command of the language of instruction often face difficulties understanding lectures, writing academic papers, and communicating with professors and peers. This leads to lower academic performance and social isolation.

The highest results were demonstrated by students in the first group, average results by students in the second group, and the lowest results by students in the third group. Among individual scores, the highest was from a student from Turkmenistan, while the second and third highest scores were from students from Morocco.

Recommendations:

Establish additional language courses for international students;

Engage tutors to assist with class preparation;

Use multimedia and interactive learning materials.

### Culture Shock

International students often encounter cultural differences that manifest in daily life and the learning process. Students may not understand local traditions, customs, social norms, or the educational system. This can cause feelings of loneliness, anxiety, or even depression.

Students from the first group performed only slightly better than those in the second group. Students from the third group demonstrated the lowest scores and raised concerns due to the severity of culture shock.

Recommendations:

Organize cultural training sessions and adaptation programs;

Provide support for international students through advisor and psychological counseling;

Involve international students in intercultural events to help them understand local traditions.

### Academic Expectations and Differences in Educational Systems

International students often face challenges due to differences in educational systems. For example, some countries have different grading systems, approaches to academic writing, or teaching methods. Students may lack the necessary skills and knowledge to study effectively in a new academic environment.

Students in the first group, despite differences in curricula, had no issues with academic requirements and showed the best results. The second group showed average results, and the third group had the lowest performance.

Recommendations:

Develop programs to help students adapt to the local educational system;

Offer preparatory sessions for coursework and exams;

Provide resources for independent study.

### Psychological Pressure and Stress

Relocating to a new country and environment is often accompanied by significant stress. Psychological pressure can stem from feelings of isolation, unfamiliar teaching approaches, financial issues, housing, and other daily-life challenges. Students may struggle to adjust to new expectations and conditions.

Students from all three groups experienced psychological pressure and stress to varying degrees. Again, students in the first group performed best, followed by the second group, with the third group showing the weakest results.

Recommendations:

Offer university-based psychosocial support services;

Create peer support groups among international students;

Involve local students in promoting social integration.

### Social Integration and Interaction with Local Students

Social integration is a key aspect of adaptation. International students may feel separated from the local student community due to language, cultural, and social barriers.

The highest level of social integration was observed in the second group, followed by the first group. The third group had the lowest scores.

Recommendations:

Organize events that encourage interaction between international and local students (festivals, sports competitions, cultural evenings);

Implement mentoring programs where local students support international peers;

Support friendship groups and student communities for international students.

### Impact on Academic Performance

All of the aforementioned issues directly affect the academic outcomes of international students. Poor adaptation may lead to a lack of motivation, low grades, or even withdrawal from the university.

Thanks to better academic preparation, students in the second group achieved the highest academic results, the first group had average results, and the third group had the lowest.

Recommendations:

Implement systems to monitor progress and needs of international students;

Develop individualized adaptation plans for students who require additional support;

Use modern technologies for interactive learning.

Based on the analysis, a diagram was created that illustrates the level of factors that reduce the level of adaptation of foreign applicants of three groups in various aspects. (Fig. 1.)

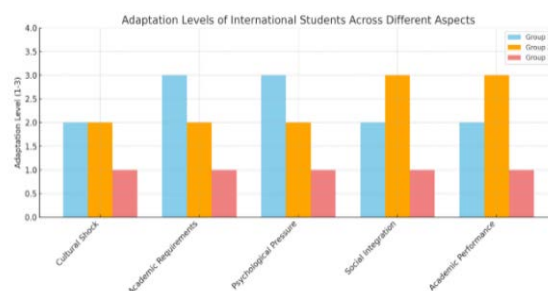


Fig. 1 The level of adaptation of foreign students in various aspects



Group 1 showed high results in adaptation to academic requirements and psychological pressure.

Group 2 leads in social integration and overall academic success.

Group 3 demonstrates the lowest results in all aspects, which indicates significant difficulties in adaptation.

The diagram well illustrates the need to support students in the third group and the importance of comprehensive adaptation programs.

## Conclusion

The adaptation of foreign students is a multifaceted and complex process that requires a comprehensive and systematic approach from educators, university administration, and society as a whole. This process is not only a matter of academic integration, but also involves psychological, social, and cultural factors that can significantly influence the success and well-being of foreign students. The recent data collected on the dynamics of adaptation to studies among foreign students in the educational program "Automobile Engineering" reveal important insights, particularly in relation to cultural distance.

The adaptation process of foreign students is closely linked to the extent of the cultural distance between their home country and the host country. Students from post-Soviet countries, who share certain historical, linguistic, and cultural similarities with the host country, have shown the highest level of adaptation to the educational environment. These students have managed to adjust relatively quickly to the academic demands, social interactions, and the general educational atmosphere. In contrast, students from Maghreb countries, while still adapting well, have encountered more challenges compared to their post-Soviet peers. They ranked second in terms of adaptation to studies, indicating that the cultural distance is still significant but not as overwhelming as in the case of students from Central Africa.

The most striking difference was observed among students from Central Africa, who, due to the substantial cultural distance, faced the greatest challenges in adapting to the new educational environment. These students had the lowest level of adaptation to studies, which can be attributed to significant differences in language, social customs, and educational

systems between their home countries and the host country. These cultural gaps can often lead to feelings of isolation, confusion, and difficulty in understanding the academic expectations.

Recognizing and addressing the pedagogical challenges that arise during the adaptation period of foreign students is essential for supporting their successful integration. It is not enough to simply focus on academic performance; understanding the emotional and social struggles that foreign students face is equally important. Developing effective strategies for supporting foreign students, such as cultural orientation programs, language support, and social integration activities, plays a key role in enhancing their academic experience and overall well-being. By addressing these issues proactively, educational institutions can ensure that foreign students are better equipped to thrive in a new academic environment, ultimately contributing to their success and the overall success of the university.

In conclusion, the adaptation of foreign students is a complex and dynamic process influenced by various factors, particularly cultural distance. A nuanced understanding of these challenges and the development of targeted support strategies are crucial for the success of foreign students in higher education, ensuring that they can make the most of their educational experience in a new cultural and academic context.

## Conflict of interests

The author declares no conflict of interest regarding the publication of this article.

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- Проблеми адаптації іноземних здобувачів до навчання за освітньої програмою "Автомобілебудування"**
- Анотація. Проблема.** Проблема адаптації здобувачів освіти до навчання у закладах вищої освіти України є надзвичайно актуальною, особливо в умовах глобалізаційних процесів, активної інтернаціоналізації освітнього простору та постійного зростання кількості іноземних студентів, які обирають Україну для здобуття вищої освіти. Адаптація є складним, багатофакторним процесом, що охоплює не лише академічну, а й соціальну, психологічну та культурну складові, які тісно взаємопов'язані та впливають одна на одну. Питаннями адаптації займаються науковці різних галузей: педагогіки, психології, соціології, культурології, лінгвістики тощо, що свідчить про міждисциплінарний характер проблеми. Особливої уваги потребують питання ефективної інтеграції іноземних здобувачів освіти до навчального середовища технічних університетів України, де освітній процес характеризується високим рівнем інтелектуального навантаження, специфічною термінологією та потребує глибоких аналітичних навичок. Враховуючи сучасні виклики освітнього ринку, зокрема зростаючу конкуренцію між ЗВО за залучення й утримання студентів, необхідно вдосконалювати механізми підтримки, наставництва та соціально-психологічного супроводу іноземців під час їхнього навчання та проживання в Україні. У статті розглядаються різні підходи до підвищення рівня адаптації іноземних студентів, зокрема методи психологічної підтримки, мовної та міжкультурної підготовки, а також організація

заходів щодо залучення їх до активного студентського життя. Водночас зазначається, що наукова спільнота недостатньо уваги приділяє вивченню впливу культурної дистанції на процес адаптації. У статті наголошується на важливості глибокого аналізу адаптації іноземних здобувачів саме в контексті культурних відмінностей, адже рівень віддаленості культури країни походження студента від українського культурного середовища може суттєво впливати на швидкість, ефективність та повноту його інтеграції в академічне й соціальне середовище ЗВО. **Мета.** Визначити рівень адаптації іноземних студентів за освітньою програмою «Автомобілебудування» залежно від культурної дистанції та виявити чинники, що сприяють або перешкоджають цьому процесу. **Методологія.** У дослідженні взяли участь 60 іноземних студентів з Туркменістану, Азербайджану, Марокко, Тунісу, Камеруну та Нігерії. Використано анкетування (у т.ч. шкала адаптації International Student Adaptation Scale), спостереження, інтерв'ю, аналіз академічних показників і позаурочної активності. Результати оброблялися кількісними (середнє, дисперсія, кореляції) та якісними методами. **Результати.** Виявлено, що найбільш адаптованими є студенти

з близької культурної зони (група 1), натомість студенти з країн з великою культурною дистанцією (група 3) зазнають значних труднощів. Основними бар'єрами стали мова, культурний шок, різниця в академічних вимогах і психологічний тиск. **Практична цінність.** Розроблено рекомендації щодо покращення мовної підготовки, культурної інтеграції та академічної підтримки, що можуть бути використані ЗВО для ефективної адаптації іноземних студентів та зниження рівня академічного відтоку.

**Ключові слова:** іноземні здобувачі, адаптація, культурний шок, мовний бар'єр, культурна дистанція.

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