

## DEVELOPMENT OF CULTURAL INTELLIGENCE OF FUTURE TECHNICAL SPECIALISTS IN THE PROCESS OF LEARNING A FOREIGN LANGUAGE

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### ABSTRACT

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In today's globalized world, more and more people work remotely using digital technologies, often in multinational teams. There is also an increase in cross-border migration of foreign students studying at universities outside their country. These trends emphasize the importance of possessing the so-called cultural intelligence as a predictor of effective online and offline interaction in multicultural groups. The four-factor model of cultural intelligence, the formation of which is the task of modern universities, includes metacognitive, cognitive, motivational and behavioral components. In the conditions of a technical institution of higher education, the development of these components should be integrated into the process of learning foreign languages through the close relationship between languages and cultures, and carried out by both traditional and digital methods, ensuring the multimodality of modern education. Among digital methods, the method of audiovisual translation stands out for its potential in teaching languages and cultures, combining acoustic and visual channels, which, together with verbal and non-verbal aspects of communication, significantly affect the assimilation of linguistic and extralinguistic material.

### KEYWORDS

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Cultural intelligence, university students, foreign language, audiovisual translation.

### 2.1 THE RELEVANCE OF THE INTERCULTURAL SKILLS FORMATION OF A MODERN SPECIALIST

A distinctive feature of the modern global world is the intensification of intercultural relations. From a socio-economic point of view, globalization is the growing economic interdependence of different countries, due to the increase in the volume of cross-border transactions with goods, services, international flows of capital and technologies. Internationalization processes are gaining momentum as international value chains become increasingly interconnected due to the increasing influence of multinational corporations [1].

Globalization is gradually changing the structure of the workforce, stimulating the growth of worker mobility, as it allows them to cross borders in search of better employment opportunities, which intensifies competition in the global labor market and transforms the sphere of employment.

According to experts, by the mid-2020s, 37% of the workforce in Europe was working remotely, and at the peak of the COVID-19 period, more than 500 million people were working remotely worldwide, which is approximately 17% of the world's population [2].

In today's world, where 15% of the population is made up of migrants [3], self-employment (freelancing), reinforced by the phenomenon of nomads ("digital itinerants", i.e. people who work remotely using digital technologies and combine professional activities with a mobile lifestyle, often changing countries and places of residence) [4], is developing rapidly and is becoming one of the main sources of income for many professionals.

There are about 1.1 billion freelancers in the world; in the US alone, their number is growing three times faster than the total workforce. At the same time, 25% of freelancers work remotely in another country or city [5].

This category of workers is also constantly expanding due to the so-called platform workers (or gig workers), who are considered independent contractors and receive payment for performing one-off tasks, such as design, writing or programming, while this type of employment through digital platforms can bring together people from different countries to carry out specific projects.

In addition, in the 21<sup>st</sup> century, there has been an increase in cross-border migration of foreign students, who study in universities outside their country and cross national borders for educational purposes [6].

All these trends reinforce the importance of possessing the so-called cultural intelligence (or cultural quotient – CQ) as the basis for effective online and offline communication in multicultural groups.

Virtual teams, consisting of members from all over the world and representing different cultures, attach particular importance to cultural intelligence, considering it as a key factor in the effectiveness of multinational teams [7], which have to adapt to innovative types of interaction.

Wilson et al. [8] believe that mastering a foreign language is the first step towards entering a new cultural environment and mastering the skills of functioning in an unfamiliar cultural environment. Research shows that, for example, language proficiency by expatriates facilitates their adaptation to a new culture, increases their motivation to search for both information necessary for survival and resources for emotional support, partly due to the ability to communicate their needs as a result of knowing the language [9].

Higher education institutions play a key role in training specialists with intercultural communication skills. Many universities around the world emphasize the development of multiculturalism among students, using approaches, such as organizing international courses, promoting cross-border mobility, attracting teachers with international experience, etc. [10]. In higher education, there is a shift towards prioritizing values over knowledge, attitudes over skills. However, there is an opinion that this shift does not have an appropriate epistemological basis and a developed training system [11].

Future technical specialists must be ready to keep up with the times, while they need to have not only competencies in their field of specialization, but also information about the latest achievements in their field, and continuously update their knowledge and skills in order to remain in demand in the modern labor market. This is difficult to achieve without knowledge of English, which is of great importance for getting acquainted with the latest achievements in the relevant field, publishing the results of their own research and developing a professional career. Moreover, it is desirable for specialists to have foreign language communication skills not only in the field of their professional activity; they should be able to establish contacts in everyday situations while outside their country: communicate in a store, restaurant, hotel, bank, on the street, etc. It is no less important that these are people with a broad horizon, able to express their opinion on

many aspects of socio-cultural life: politics, history, economics, art, etc. After all, future graduates should have developed intercultural communication skills, since they may have to solve professional problems with foreign partners – representatives of other cultures.

And if there are enough resources available for teaching everyday and professional communication in foreign languages, then the issue of preparing for intercultural communication remains in the field of view of educators of all countries and requires the search for new ideas and approaches. Research shows that intercultural learning in foreign language classes lacks systematic planning, is often fragmented and biased [12], and teachers do not always have a clear idea of what to teach and how to develop the intercultural competence of their students.

## 2.2 THE ESSENCE AND MAIN COMPONENTS OF CULTURAL INTELLIGENCE

The definition of CQ as the ability to recognize the peculiarities of cultures, establish connections and work effectively in culturally diverse contexts and situations was first presented in 2003 by Ang and Early. According to researchers, developed CQ instills in an individual the confidence necessary for successful work in a wide range of multicultural conditions, helps in overcoming intercultural barriers and increases the efficiency of work in multinational teams [13].

The authors of the CQ concept proposed a four-factor model of cultural intelligence, which includes metacognitive, cognitive, motivational and behavioral components.

The metacognitive component of CQ reflects a person's ability to build strategies for acquiring cultural knowledge. The following skills were highlighted in its structure: planning as preparation for intercultural interaction, formulation of long-term and short-term goals of such interaction; understanding the peculiarities of one's own behavior and the behavior of the opponent, mediated by belonging to a certain culture; understanding the nature of the mental processes of representatives of another culture; understanding the specificity of the intercultural communication situation; comparing expectations from intercultural interaction and its real results; appropriate adjustment of ideas about other cultures based on the acquired experience. Thus, an individual with a high level of the metacognitive component of CQ predicts the development of a potential situation of intercultural interaction, plans the course of the meeting in advance, predicts its results, and adjusts the model of his/her behavior based on the acquired experience.

The cognitive component of CQ takes into account general and contextual knowledge about culture. General knowledge refers to knowledge of universal elements of the cultural environment: economics, law, politics, religion, moral values, language, etc. Contextual knowledge is knowledge that is applied in a certain situation, which helps to better understand the meaning of what is happening, interpret information and effectively act in accordance with it. For example, in the field of business communication, contextual knowledge may contain data on the features of negotiations and conclusion of agreements, the structure and procedure for managing employees and processes, etc. An individual with a high level of the cognitive component of CQ understands the differences and similarities of cultures using general knowledge and, on this basis, organizes contextual knowledge for effective interaction within a specific field and communication situation.

The motivational component of CQ reflects the desire and intention of the individual to direct attention and energy to intercultural interaction. The main parts of the motivational component of CQ are intrinsic and extrinsic motivation. Intrinsic motivation is defined as a personal interest in intercultural interaction, based on the pleasure of getting to know new cultures, communicating and working together with their representatives. Extrinsic motivation manifests itself in the form of interest in possible personal benefits associated with gaining intercultural experience.

The behavioral component of CQ is considered as the ability of an individual to perform adequate verbal acts and non-verbal actions during communication with representatives of other cultures. The key indicators of the behavioral component of CQ are the flexibility and versatility of verbal and non-verbal behavior. Having developed verbal skills, a person can freely communicate and control the situation, perform speech acts in accordance with cultural standards. Such acts include requests, invitations, apologies, thanks, disagreement, refusals, etc. Verbal behavior is complemented by paraverbal behavior, which is manifested in the ability to vary the pace, volume, emotionality and tone of speech, to use pauses and silence in accordance with the norms accepted in a particular culture. Nonverbal behavior involves communicative interaction and transmission of information in the form of body language, i.e., gestures, facial expressions, posture, as well as maintaining interpersonal distance, establishing eye contact, maintaining an appearance appropriate to the situation.

All these manifestations of nonverbal behavior can contribute to successful communication with representatives of other cultures or, conversely, hinder it, since the correct interpretation of nonverbal signals is an essential condition for effective communication.

The Ang and Early model was later supplemented by Livermore [14] with the following four sub-dimensions that enrich the understanding of the cultural intelligence structure: CQ Drive, CQ Knowledge, CQ Strategy and CQ Action. CQ Drive is represented by the willingness to work with people from different cultures and backgrounds, while CQ Knowledge is the degree of understanding of cultural differences and similarities. CQ Strategy is the ability to mentally adapt to new cultures. Finally, CQ Action is related to the flexibility to adapt to different cultural norms and habits.

The results of empirical studies show that developed CQ is positively correlated with labor productivity in multicultural teams and acts as a predictor of the success of cultural adaptation. Data collection and analysis prove that specialists with a high level of metacognitive and behavioral components of CQ, involved in intercultural activities, are assessed by their managers as more effective and those who meet social expectations, since they demonstrate a conscious readiness to build strategies in intercultural relations (metacognitive component of CQ) and generally perform better in understanding and accepting culturally conditioned expectations of their social role [15].

The main centers for studying cultural intelligence, its assessment and development directions within the framework of various training programs are the Cultural Intelligence Center (<https://culturalq.com/>) in the USA, and the Center for Leadership and Cultural Intelligence in Singapore (<https://www.ntu.edu.sg/clci>), whose tasks are to expand international cooperation, strengthen trust and overcome differences between team members, stabilize the work team and prevent professional burnout, develop and improve adaptation skills to any place and any team.

One of the important characteristics of CQ is that it can be formed and developed [11–13], therefore, the task of universities is to develop training programs that would ensure the development of cultural intelligence of future graduates and, accordingly, their preparation for intercultural communication.

### 2.3 APPROACHES TO THE CULTURAL INTELLIGENCE FORMATION

In many pedagogical systems, preparation for intercultural communication is carried out in parallel with the study of a foreign language due to their direct interdependence, since language is the main tool of communication, and intercultural communication is a process of interaction between representatives of different cultures, which is impossible without knowledge of languages, as well as cultural norms and rules of etiquette.

Back in 1997, the famous researcher of intercultural communication M. Byram combined two concepts – intercultural competence and communicative learning of a foreign language – in his "knowledge model", which became the main text for the formation of intercultural communicative competence (ICC) over the next two decades. Risager [17] emphasizes that, unfortunately, in the 25 years that have passed since the presentation of the model, the relevance of the fight against racism, poverty, sexism, wars, diseases and climate change has only increased, which requires ever closer cross-border and intercultural cooperation between nations.

M. Byram identifies five groups of ICC skills that contribute to the development of students' cultural intelligence, namely: the formation of attitudes, the acquisition of knowledge, interpretation and correlation, the realization of discoveries and interaction, as well as critical awareness of culture. Later, these groups of skills were refined and specified by the relevant structures of the European Union dealing with issues of pluralism and preparation for intercultural communication [18], and now have approximately the following form:

1. *Attitudes* (according to Byram *savoir être*) are related to the value orientations of the individual, expressed in the manifestation of curiosity and openness, readiness to overcome distrust of other cultures; the ability to demonstrate their knowledge of various linguistic and cultural aspects. For example, in the aspect of intercultural awareness, individuals may demonstrate such attitudes as a sensitive attitude to the existence of other languages/cultures/ people, a positive perception of linguistic/cultural/human diversity, etc.

2. *Knowledge* (according to Byram *savoirs*) refers to knowledge of the characteristics of social groups, the products of their activities and the practices they carry out both in their own country and in partner countries, awareness of the processes of social and individual interaction; possession of information about specific linguistic and cultural phenomena. To form intercultural competence, students should be taught: understanding cultures, similarities and differences between them, awareness of their diversity, awareness of the role of culture in intercultural relations and communication.

3. *Interpretation and correlation skills* (according to Byram *savoir comprendre*) mean the ability to interpret a text or event related to another culture, explain them and correlate them with similar phenomena of one's own culture; mediate content between cultural points of view.

4. *The ability to discover and interact* (according to Byram *savoir apprendre/faire*) is correlated with the ability to obtain new knowledge about another culture, operate with this knowledge, manage behavior in the real practice of intercultural communication; observe/analyze language elements/cultural phenomena, interact in situations of contact between languages/cultures, compare the features of different languages or cultures.

5. *Critical awareness of culture/political education* (according to Byram *savoir s'engager*) reveals the ability to critically and accurately evaluate the perspectives, processes and products of one's own and other cultures, to consider and analyze cultural practices through an ethical and evaluative prism.

In the methodology of teaching foreign languages, the Byram concept involves going beyond teaching language accuracy, emphasizing instead the understanding of the cultural diversity of the world.

Another leading researcher of intercultural communication issues, D. Deardorff [19], offers her theoretical model of the components of intercultural communication, some elements of which can complement the four-factor model of CQ.

The components of this model are also knowledge (corresponding to the cognitive component of CQ), attitudes (metacognitive), skills (behavioral) and expected internal-external results (motivational in combination with behavioral). Attitudes in intercultural communication imply a sense of respect for representatives of other cultures, curiosity about the cultural diversity of the world, openness, non-judgment or stereotypes, tolerance. Attitudes can change for the better depending on how well the individual is aware of other cultures (values and norms), language (grammar and vocabulary) and context, including history, literature, cultural artifacts, political, economic, religious systems in other cultures. Ultimately, skills are acquired through participation in intercultural situations, careful observation of the process of intercultural interaction, critical self-reflection, acceptance of other people's perspectives, verbal and non-verbal communication.

A clear understanding of the content of the CQ components helps to build practical models of their formation.

Today, one can everywhere observe the use of an eclectic method in teaching languages and cultures, which combines different approaches and techniques depending on the needs of students. A creative teacher can choose and adapt elements of different methods (grammatical-translational, audio-linguistic, direct, immersion, communicative, suggestopedic, etc.) to the goals of the lesson, creating a single logical learning system. However, the formation of these skills in the aspect of CQ is impossible to imagine today without the use of information and computer technologies.

According to researchers, there is a transition from the dominance of writing to the dominance of the image in modern education and, as a result, from the dominance of the book to the dominance of the screen as a means of communication. The emergence of new, diverse and multidimensional channels of communication, the perception of information through vivid images and sounds inherent in multimedia culture, has led to the expansion and rethinking of the competencies that make up the concept of literacy, which now includes the ability to find and critically evaluate digital, electronic and visual means of expression [20], create and use digital content, communicate safely online and protect your personal data.

Modern information technologies provide new opportunities for learning foreign languages compared to the times when mechanical memorization from a paper textbook was the main means of foreign language learning. The modern educational environment is becoming increasingly multimodal, as it uses text,

gesture, visual and audiovisual elements to convey meaning. It is now hardly possible to maintain students' motivation to obtain education without using multimodal teaching aids, so teachers and, in particular, foreign language teachers have to adapt to these changes, since multimodal methods, reflecting the multi-layeredness and diversity of real communication, can make language learning more attractive for modern so-called "digital natives". Therefore, multimodal learning, combining visual, auditory and kinesthetic sensory modalities, has recently attracted increasing attention from theorists and practitioners as a means of improving the quality of teaching and learning a foreign language.

Multimodality is considered as two interrelated concepts: perceptual mode and modality. Perceptual mode is defined as a socially constructed and culturally given resource for creating meaning, such as images, text and its design, music, gestures, language, moving images, and soundtrack [21]; while modality is the integration of two or more semiotic resources (including language) in the transmission of meaning [22].

Multimodal presentation of information, that is, inputting it in different ways – written, auditory, and visual, is constantly encountered in everyday life. For example, a video sequence with text, which can often be seen on a television screen, on websites, and in social networks, can be considered as audiovisual input. Studies show that audiovisual input expands opportunities for vocabulary acquisition, affects the effectiveness of grammar learning, forms phonetic competence, and improves listening skills [23].

The multimodal approach as a complementarity of different modes of perception fully reflects the reality of the modern communication environment, in which meanings are created both by language and by images, movements, gestures, sounds, etc. In the digital age, when there are many media channels of influence on the degree of understanding and assimilation of material by students, this approach is one of the most promising, since it offers a wide range of semiotic resources, the use of which can potentially improve learning outcomes.

Today, there is a huge variety of fragmentary Internet resources related to various aspects of the cultures of many peoples, and which are practically impossible for students to understand on their own. Therefore, so far, traditional textbooks are the source, in which cultural information can be structured and presented in a systematized, methodically processed form.

Textbooks are often considered the main tool for foreign language training in many language educational environments, and from the point of view of multiculturalism, they can become a rich source of cultural knowledge and information. Textbooks can also convey cultural information through images, texts, audio and video materials, dialogues, lexical items, and other means [24].

Researchers who analyzed the intercultural aspect in the content of a significant number of English as a foreign language textbooks concluded that:

- a) textbooks should include as much information as possible about different cultures and the students' native culture, rather than focusing only on the culture of the target language;
- b) there is a shortage of textbooks that explore language in a cultural aspect;
- c) there is a lack of authentic problem-solving tasks for the development of intercultural competence;
- d) textbooks do not provide sufficient opportunities for the development of critical cultural perception, since they consider cultures in isolation and position students as simple spectators and passive consumers of factual information;

e) the cultural content of textbooks available today cannot in itself contribute to a deep critical understanding of otherness without the help of a teacher [25].

This list of problematic aspects of the analyzed textbooks can be added by the fact that the authors of a modern textbook or educational complex should take into account the multimodality of modern education and develop educational materials with the addition of its elements. It is desirable to rethink the essence of modern communication and teach students not only to read multimodal texts (viewing), but also to be able to independently generate and transmit multimodal content (representing). This new type of literacy is extremely important for the current generation, as it corresponds to their lifestyle, types of activities and features of interaction with others.

A significant factor influencing the quality of preparation for intercultural communication in today's open-border society is cultural immersion, which means the quality and frequency of interaction between people with culturally diverse experiences, the establishment of friendly relations between representatives of different countries, participation in intercultural events, exchange programs and study abroad, and consumption of global media.

Exposure to diverse cultural practices stimulates reflection on one's own cultural attitudes and deepens understanding of cultural diversity, which is the basis of multicultural literacy. Cultural intelligence is widely associated with a person's propensity to acquire intercultural experience and seek out diverse cultural contacts. People with high levels of CQ are more likely to seek opportunities for intercultural communication, for example, by joining multicultural student organizations, participating in cultural exchange activities, or building personal relationships across ethnic or national boundaries [26]. Such interactions provide the contextual information needed to update, test, and improve cultural knowledge and understanding.

Carefully organized and meaningful intercultural contact provides students with the opportunity to practice and improve communication strategies in an authentic setting. When they participate in international events, study abroad programs, or interact with peers from other cultures on a regular basis, they often have to decipher unfamiliar verbal and nonverbal cues, recognize their meanings, and adjust their communication style accordingly.

Cultural immersion strategies include study abroad programs, short-term international internships, multicultural campus events, multicultural festivals jointly organized by domestic and international student organizations, student discussion clubs, and more.

Both in-class and extracurricular activities should include activities that promote interpersonal adaptation, intercultural dialogue, and collaborative problem-solving. Examples include structured intercultural debate series, virtual exchange programs that bring students together with peers from abroad for joint projects, and mentoring systems, in which students from different linguistic and cultural groups work together to develop presentations or research reports. Group assignments by students representing different cultures can create a comfortable creative environment for developing communication skills and at the same time improve mutual understanding. In addition, teacher training programs can equip educators with the skills needed to model and implement inclusive communication practices in multinational classrooms [27].

Also, with the increasing internationalization of educational institutions, virtual mobility programs are becoming increasingly popular [28].

Virtual mobility is considered as the use of information and communication technologies to obtain the benefits of physical mobility without the need for geographical movement. It can be both a form of academic mobility (online learning in foreign universities) and the opportunity to work, communicate and obtain education using the Internet. It allows overcoming geographical and physical limitations and can be used in education in the form of online courses, webinars, virtual laboratories, training in virtual reality, for the implementation of international projects and cooperation with peers and colleagues from different countries. In the student environment, it can be a set of activities supported by information and communication technologies that promote international cooperation in the context of teaching and learning. Among the advantages of virtual mobility is that it allows people with disabilities to participate in educational and professional programs, since to obtain a quality education you do not need to change your place of residence, it allows you to study and work at a convenient pace and at a convenient time from anywhere in the world.

In the context of intercultural communication, virtual mobility allows participants from different locations to exchange ideas regardless of distance. It creates a space for dialogue and intercultural exchange of experiences between people, creating conditions for the organization and implementation of joint research, programs and projects.

Virtual mobility has its own characteristics [28]. First of all, it is not a one-way webinar or online lecture. It focuses on interaction and dialogue, involves not just familiarization with the content of a specific course, but the development of flexible skills, intercultural awareness and intercultural understanding.

Virtual mobility can be adapted to specific tasks, it helps to establish personal and professional connections, its flexibility and potential for customization to personal plans allows people to participate in virtual mobility programs according to their interests and goals.

## **2.4 TECHNOLOGICAL SUPPORT FOR THE CULTURAL INTELLIGENCE FORMATION UNDER CONDITIONS OF A TECHNICAL UNIVERSITY**

The goal of the formation of cultural intelligence of students of a technical university is defined as preparation for contact with another culture, training in adequate verbal and non-verbal behavior in the conditions of a foreign culture, the formation of a transnational culture of a future specialist. The organization of such training requires carefully selected methods and educational materials that take into account the diversity of world cultures, the features of the future professional activity of future specialists and the multimodality of modern education.

It is advisable to rely on various theoretical principles regarding human nature, cognitive processes, behavior, communication methods and research methods in the process of preparation for educational and extracurricular activities. This is primarily a functionalist approach based on psychological data and aimed at describing and predicting the behavior of communicators; an interpretative approach, based on research in the field of anthropology and sociolinguistics, is descriptive in nature and proceeds from the fact that culture is created and exists due to human activity; a critical approach based on the perception of culture as a sphere of rivalry, taking into account the economic and political forces that influence the characteristics of communication [29].

Guided by these principles, CQ formation in students of technical specialties of Kharkiv National Automobile and Highway University (KhNAHU) was provided in several stages.

The first stage involved the assimilation of background information about the facts of different cultures in the form of cultural texts, as much as possible on a contrastive basis compared to the facts of one's own culture, that is, obtaining certain knowledge. At the same time, the main attention was focused on understanding communicative models within a separate cultural group.

The next stage was the interpretation of the learned facts in intercultural contact and conflict situations, the selection of ethnic, political and economic features of cultures that influence the thinking, values and behavior of representatives of a particular community, the analysis of texts, especially those created by the mass media (television programs, video materials, publications in the press), which significantly influence the culture formation of modern youth.

At the next stage, intercultural situations, in which students played the roles of representatives of different cultures, were recreated. This direction is usually implemented using functional methods related to the theory of communicative adaptation, according to which in situations of intercultural communication people often change the models of their communicative behavior, adapting to the models of partners. For example, when communicating with foreigners we can speak slower and clearer, use less jargon, facilitating the process of understanding for the interlocutor.

Taking into account the components of CQ, a training manual "Theory and Practice of Intercultural Communication" [30] was developed, which is posted on the educational website of the KhNAHU.

The manual, based on the theoretical material and practical experience accumulated by the authors, attempts to give a generalized idea of the model of teaching intercultural communication using the English language, which can be used by future specialists to establish intercultural contacts.

The training course systematically presents the main problems and topics of intercultural communication, which ensure the development of cultural sensitivity and the ability to correctly interpret specific manifestations of communicative behavior in different cultures; it provides for the formation of practical skills and abilities for communicating with representatives of other cultures.

The manual consists of theoretical and practical parts. The theoretical part is aimed at familiarizing students with the features of intercultural communication, the second – with the features of cultures typical of different regions of the world.

The educational material covers a significant number of topics that are characteristic of intercultural communication, for example, types of communication, examples of intercultural differences, ways to improve intercultural communication, features of business negotiations, conflict resolution in a multicultural environment, the concept of ethnicity in the context of intercultural relations, etc.

The manual contains many tasks of both reproductive and discussion and creative nature. Its second part is devoted to comparing cultures of different countries, solving problem situations and performing a case study.

The authors sought to ensure that the diverse content of the manual and the proposed activities to a large extent ensure the formation of all CQ components. For example, when working with the topic "A guide to international business negotiations", students are offered the following multi-level exercises:

**Read the text carefully and choose the one best answer, a, b, c or d to each question:**

1. With which of the following must not the parties deal in the process of international business negotiations?
  - a) laws;
  - b) weather conditions;
  - c) policies;
  - d) political authorities.
2. Which of the following are private firms primarily concerned with?
  - a) donating for social needs;
  - b) creating new jobs;
  - c) paying taxes;
  - d) making profits.
3. Which event cannot have an impact on international business?
  - a) currency devaluation;
  - b) war or revolution;
  - c) changes in government;
  - d) public festivals.
4. Which of the following cannot protect companies against risks of doing business in another country?
  - a) including force majeure clauses in the contract;
  - b) insuring foreign investments;
  - c) having good relationships with partners;
  - d) employing political risk analysts.
5. In what aspects do not cultural differences show up?
  - a) decision-making styles;
  - b) language;
  - c) preferred pacing of negotiation;
  - d) attitude to eternal values.

**Discussion questions:**

- a) In what way, do you think, international business negotiations differ from domestic ones?
- b) What aspects should you keep in mind before entering the negotiation process with partners from other countries?

**Creative tasks:**

You own a company and are going to conclude your first export contract. What could be done to secure this contract and to establish long-term relations with your perspective partners?

The following tasks can be solved in the second part of the guide for comparing different cultures:

- a) Write a portrait of a typical/average Englishman, Australian, Spaniard, Arab, etc. Then comment on their similar features and cultural differences.
  - b) Write a list of DOs and DON'Ts for a friend of yours who is going as a tourist to:
    - Australia;
    - the United Arab Emirates, etc.
-

c) A businessman who ran business in various countries was not well-equipped for intercultural communication and made some mistakes in his behaviour. Find and correct them.

d) You are going to have your first business negotiations with businessmen from Spain. You want to get ready for them and try to foresee everything in detail. Write a plan and act out your version of these negotiations.

In addition to the text material, each topic of the manual is accompanied by a video of either a general cultural nature (for example, countries and continents, 7 wonders of the world, traditions and rituals, the best museums of the world, etc.), or revealing individual aspects of intercultural interaction. Tasks for understanding its content and discussion are developed for each video.

For example, the topic "Basic principles of nonverbal communication" is accompanied by the video "10 Types of Nonverbal Communication Explained in 3 minutes" (<https://www.youtube.com/watch?v=5n-LQI9e5NV8>), for which the following tasks are developed:

1. Match the notions with their definitions:

- |                        |   |
|------------------------|---|
| 1. gestures            | a. being in contact   |
| 2. posture             | b. the tone pitch and speed of your voice                       |
| 3. proximity           | c. the subconscious imitation of another person's body language |
| 4. touch               | d. deliberate movements to reinforce or replace communication   |
| 5. paralanguage        | e. the position of the body                                     |
| 6. physical appearance | f. the absence of sound or noise                                |
| 7. silence             | g. the way we dress, groom and present ourselves                |
| 8. mirroring           | h. how close we stand to each other                             |

2. Match the opposing statements:

- |   |  |
|---|--|
| A smile can express joy or politeness                                   | in others it might feel intrusive.                         |
| Upright posture communicates confidence and openness                    | it may feel overfamiliar in the other.                     |
| In some cultures, proximity is a sign of familiarity or friendliness    | <i>while</i> words fill the space.                         |
| Silence can indicate comfort, discomfort, contemplation or disagreement | a frown can show displeasure or confusion.                 |
| A light tap on the shoulder could feel supportive in one setting        | slouching can indicate insecurity, fatigue or disinterest. |

3. Match the halves of the sentences:

- |                                       |  |
|---------------------------------------|--|
| 1. Facial expressions are universal   | a. to reinforce or replace verbal communication.                 |
| 2. Happiness, anger, sadness          | b. for interpretation.   |
| 3. Eyes are often called              | c. the unconscious way of saying we are in sync with the others. |
| 4. Avoiding eye contact might suggest | d. defensiveness or discomfort.                                  |

- |   |   |
|---|---|
| 5. Gestures are deliberate movements we use | e. whether you are in Tokyo or Toronto.                   |
| 6. Crossing arms can signal                 | f. discomfort, dishonesty, or disinterest.                |
| 7. The space you allow can reflect          | g. but the meaning changes depending on how you say them. |
| 8. You may say the same words               | h. your comfort level and respect for boundaries.         |
| 9. Silence leaves room                      | i. are understood without words.                          |
| 10. Mirroring is                            | j. the windows to the soul.                               |

4. Explain why interpreting nonverbal cues is crucial for successful intercultural interaction.

To elaborate the cognitive and motivational components of CQ, we also developed original videos of a general cultural nature using the audiovisual translation (AVT) method, which were posted on the YouTube platform.

To select the content of the videos, a three-dimensional model of cultural space, popular in cultural studies, was used, characterized by three subsystems: technological culture, social culture, and spiritual culture. A generalized list of cultural components was selected and formed, which contains, in our opinion, a significant amount of cultural knowledge that can be transferred to students in a foreign language.

Technological culture was correlated with knowledge about: science as a branch of human activity aimed at developing and systematizing objective knowledge about reality; technology as the application of scientific knowledge to solve practical problems; economics as the economic activity of society.

We associated social culture, first of all, with the sphere of communication, where we distinguished: language as a complex sign system, a means of communication between representatives of a certain ethnic group; and intercultural communication as communication between representatives of different cultures.

In the sphere of spiritual culture, we included history as the science about the development of society; art as a creative reflection of reality in creative images; literature as a type of art that uses the word as the only material; religion as one of the forms of social consciousness based on belief in supernatural forces; political science as the study of political organizations and the political life of society, problems of domestic politics and international relations; sociology as the science about society, the laws of its functioning and development, and social institutions.

In accordance with the selected topic, texts were compiled, and processed in digital format in the form of video clips using AVT.

When creating the clips, we used the students' native language to a certain extent, which is a characteristic feature of AVT, and processed them in this way. Voiced parallel translation was performed, after which the students received a bilingual script, as well as video and audio recordings of new words and phrases that make up the texts in both languages for extracurricular independent study. The vocabulary for the texts and the texts themselves were placed on the screen in parallel with their translation. The material was listened to simultaneously with visual support, repeated during pauses after the speaker, and it was practiced and consolidated in the performance of creative or problem tasks in class. The method of parallel translation, the effectiveness of which is still underestimated, is used by many polyglots, and in modern audiovisual support this method can be used to assimilate large volumes of cultural material.

AVT as a promising direction in linguistic didactics is developing rapidly and successfully due to the improvement of digital technologies, significantly influencing the popularization of foreign languages and cultures. This method is defined as the transmission of verbal language in audiovisual media and, as a rule, is used as a general term to denote "screen translation", "multimedia translation", "multimodal translation" or "film translation" [31].

The multimedia nature of audiovisual programs allows combining acoustic and visual channels, which, together with verbal and nonverbal aspects of communication, provide a significant impact on the assimilation of linguistic and extralinguistic material.

To assess the level of CQ formation by all the described means, we used a proven, reliable and valid diagnostic toolbox proposed by the authors of the CQ concept [15].

Based on the four-factor model of CQ, the researchers developed the "Cultural Intelligence Scale" (CQS), which consists of 20 items, four of which assess metacognitive CQ, six items assess cognitive CQ, five items assess motivational CQ, and five items assess behavioral CQ (**Table 2.1**). Students were asked to rate their level of agreement with each of the following statements using the following scale: 1 – strongly disagree; 2 – disagree; 3 – tend to disagree; 4 – difficult to answer; 5 – tend to agree; 6 – agree; 7 – strongly agree.

● **Table 2.1** Cultural Intelligence Scale

CQ component	No.	Statements
		1 2 3
Metacognitive CQ	1	I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds
	2	I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me
	3	I am conscious of the cultural knowledge I apply to cross-cultural interactions
	4	I check the accuracy of my cultural knowledge as I interact with people from different cultures
Cognitive CQ	5	I know the legal and economic systems of other cultures
	6	I know the rules (e.g., vocabulary, grammar) of other languages
	7	I know the cultural values and religious beliefs of other cultures
	8	I know the marriage systems of other cultures
	9	I know the arts and crafts of other cultures
	10	I know the rules for expressing non-verbal behaviors in other cultures
Motivational CQ	11	I enjoy interacting with people from different cultures
	12	I am confident that I can socialize with locals in a culture that is unfamiliar to me
	13	I am sure I can deal with the stresses of adjusting to a culture that is new to me
	14	I enjoy living in cultures that are unfamiliar to me

Continuation of Table 2.1

1	2	3
	15	I am confident that I can get accustomed to the shopping conditions in a different culture
Behavioral CQ	16	I change my verbal behaviour (e.g., accent, tone) when a cross-cultural interaction requires it
	17	I use pause and silence differently to suit different cross-cultural situations
	18	I vary the rate of my speaking when a cross-cultural situation requires it
	19	I change my non-verbal behaviors when a cross-cultural situation requires it
	20	I alter my facial expression when a cross-cultural interaction requires it

To calculate the scores separately for each component, it was necessary to consult the **Table 2.2**.

● **Table 2.2** Calculation of scores for CQ components

Component name	Question number
Metacognitive	1, 5, 10, 14
Cognitive	2, 6, 9, 11, 15, 18
Motivational	3, 7, 12, 16, 19
Behavioral	4, 8, 13, 17, 20

To determine the total score, the total number of points for all items of the questionnaire is calculated:

- from 0 to 55 – very low cultural intelligence;
- from 55 to 71 – low cultural intelligence;
- from 71 to 103 – average cultural intelligence;
- from 103 to 119 – high cultural intelligence;
- from 119 and above – very high cultural intelligence.

Studies of the psychometric characteristics of the questionnaire "Cultural Intelligence Scale" demonstrated good internal consistency: Cronbach's alpha coefficient for the total CQ indicator was 0.90, and the "item-total" correlations ranged from 0.32 to 0.58. This means that the questions of the scale are closely interconnected and, taken together, measure the same concept.

The results obtained by processing the answers to the questionnaire at the beginning and after working with the course, which lasted for one academic year, showed that if at the beginning of the academic year the percentage of students with a high CQ level was 7%, low CQ – 34% and average – 59%, then after completing the course using various methods these indicators changed significantly. The percentage of students with a low level decreased almost by half and amounted to 16%, the percentage of students with a high CQ level increased significantly and amounted to 36%, the number of students with an average level decreased accordingly to 48%, which may indicate the effectiveness of the proposed approach.

## 2.5 DISCUSSION OF THE RESULTS OF SECTION 2

The modern globalized world, increasing academic and scientific mobility have led to multilingual societies, in which sociocultural exchanges between native and non-native speakers have become a common practice, reinforcing the importance of not only linguistic but also intercultural training.

In the scientific literature, the result of intercultural training is denoted by such terms as cross-cultural competence, intercultural competence, cultural sensitivity, cultural awareness, multicultural literacy and some others. All of these terms refer to the ability to understand people of different cultural backgrounds, communicate and interact effectively with them, although different terms may emphasize specific aspects of intercultural communication.

Cultural intelligence is another term close to this group, which, in our opinion, combines most of the characteristics that a modern specialist trained for intercultural interaction should have. If we summarize all the above-listed features of the CQ components, we can distinguish the following essential features. The behavioral component of CQ is the ability to adapt both verbal and non-verbal behavior to ensure its effectiveness in various cultures; the motivational component is manifested in a person's desire to learn something new; the cognitive component is associated with the ability to analyze and evaluate the degree of variability of other cultures compared to one's own culture; the metacognitive component is correlated with the degree of a person's conscious cultural awareness and his/her ability to adapt his/her mental map as an organic way to organize ideas, concepts, tasks, without limiting him/herself to a linear structure during intercultural interaction.

One of the important characteristics of CQ is that it can be formed and developed.

In the conditions of a technical university, the programs of which prioritize special technical knowledge and skills, it is very difficult to find an opportunity to teach a course of intercultural communication as a separate discipline. But given the above-substantiated importance of this aspect of specialist training, it is necessary to look for opportunities to integrate the course or its individual elements into the content of teaching other, usually humanitarian, disciplines, one of which is a foreign language.

Different specialties of technical universities allocate different number of hours to studying a foreign language. For example, at KhNAHU, students specializing in mechanical engineering or construction and civil engineering are allocated 7 credits for studying a foreign language, while students studying under the Automation, Computer-Integrated Technologies and Robotics program are allocated 17 credits. Accordingly, in the second case, the language learning program can be much more saturated with elements of cross-cultural training and lead to better results.

In general, the step-by-step improvement of curricula taking into account the geopolitical context, future professional needs, and general cultural erudition of students is an urgent task for teachers.

A distinctive feature of the described approach to CQ formation is its reliance on an eclectic method that integrates the techniques of the grammatical-translation method, communicative language teaching, audio-lingual method, problem-based learning, and the method of audiovisual translation. This flexible method has become popular because it allows for more personalized, engaging, and, accordingly, attractive learning for students.

Today's learning of foreign languages and cultures is greatly facilitated by the capabilities of information technology, which allow students to improve their communication strategies and acquire intercultural interaction skills in real cultural situations.

Acquaintance with a diverse cultural environment through personal relationships, curriculum content or digital content stimulates reflection and activates the components of cultural intelligence in practice.

Given the inevitability of globalization processes, on the one hand, and the steady development of information technologies, on the other, the relevance of developing new approaches to intercultural training is only increasing. Empirical research into various psychological, sociological and linguistic aspects of such training, new approaches to the development of students' practical skills using interactive methods, improving foreign language teaching methods in the aspect of cross-cultural communication, expanding the horizons of international cooperation, which is an authentic basis for the formation of intercultural interaction skills are necessary.

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