

## FORMATION MODEL OF TECHNICAL UNIVERSITY STUDENTS' INTERCULTURAL COMMUNICATIVE COMPETENCE

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**Abstract.** In the present article, a model of formation of intercultural communicative competence of tertiary students majoring in technical specialties is considered. Essential features of various concepts on developing foreign language communicative competence are reviewed. Various scientific and theoretical literary sources on the topical issue are analyzed. Based on this analysis and the authors' own experience in the field of ELT, a definition of the notion of «Intercultural Engineering Communicative Competence» is formulated and its structural components are proposed. Thus, lingua-communicative, socio-cultural, engineering-conceptual and project-research subcompetences are distinguished and explained. Moreover, the principles and conditions of the formation of technical university students' intercultural communicative competence using a Situated Language Teaching (SLT) technology are suggested. The authors have defined the basic principles and specific features of the use of SLT in the development of intercultural communicative competence of future engineers. Within the developed framework the situational tasks can be implemented in different forms, including and not limited to case-study, problem and project based learning, role-plays, simulations, etc. – unless they are produced in accord with the principles and conditions of the model. The designed formation model of technical students' Intercultural Engineering Communicative Competence has been experimentally tested. This article also exhibits the results of a pedagogical experiment conducted at Satbayev University. The findings of this study can benefit researchers, curriculum developers and teachers in the field of foreign language teaching, particularly English language teaching.

**Key words:** intercultural communicative competence, English for non-linguistic specialties, English for engineers, Technical English, English for Specific Purposes, foreign language teaching, subcompetences of foreign language communicative competence, competence-based language teaching

### Introduction

Foreign language training in universities of Kazakhstan is defined as compulsory in accordance with the State Compulsory Standard of Higher Education of the Republic of Kazakhstan dated July 20, 2022 (as amended on 06.03.2023) [1]. This State Educational Standard of Higher Education (hereinafter referred to as the SES) has been developed in accordance with the Law of the Republic of Kazakhstan “On Education” and defines the requirements for the content of education with a focus on learning outcomes, the maximal academic load, the level of preparedness of the learners and training period in the higher education institutions.

According to this SES, the content of the educational program of higher education consists of disciplines of three cycles: general education disciplines, basic disciplines and major disciplines. The discipline “Foreign Language” is a mandatory component of the cycle of general education disciplines.

In accordance with paragraph 6 of the SES under consideration, the disciplines of the compulsory component of the cycle of general education disciplines:

1) are aimed at developing the worldview, civic and moral positions of a future specialist, competitive on the basis of mastery of information and communication technologies, building communication programs in Kazakh, Russian and foreign languages, focusing on a healthy lifestyle, self-improvement and professional success;

2) form a system of general competencies that ensure the socio-cultural development of the personality of the future specialist based on the formation of his ideological, civic and moral positions;

3) develop abilities for interpersonal social and professional communication in Kazakh, Russian and foreign languages;

4) contribute to the development of information literacy through the mastery and use of modern information and communication technologies in all areas of their lives and activities;

5) form skills of self-development and life-long learning;

6) form a personality capable of mobility in the modern world, critical thinking and physical self-improvement.

The document also provides the expected learning outcomes upon completion of the study of compulsory disciplines in the cycle of general education disciplines, and subject “Foreign Language” includes the following of them:

- The student enters into communication in oral and written forms in Kazakh, Russian and foreign languages to solve problems of interpersonal, intercultural and industrial (professional) communication;

- The student uses language and speech tools based on a system of grammatical knowledge; analyzes information in accordance with the communication situation;

- The student evaluates the actions of the participants of the communication process.

Currently, the leading technical universities of Kazakhstan (such as Satbayev University, Kazakh National Agrarian Research University, Almaty Technological University, International University of Information Technologies, West Kazakhstan Agricultural Technical University named after Zhangir Khan, Academy of Logistics and Transport and International University of Engineering and Technology) in addition to core technical specialties train students of economic and, in some cases, legal specialties. Consequently, today, according to the SES, technical universities in our country provide training in three areas: higher engineering education, higher economic education or higher legal education, as well as higher agricultural education. And in each of these areas, studying the discipline “Foreign Language” is mandatory. As a rule, technical universities in the country teach the most common and popular foreign language – English. In accordance with the SES, 10 academic credits are allocated for the “Foreign Language” discipline, which is equivalent to 300 academic hours [1].

We are living in the XXI century – in the era of rapid technological advancement and global industrial development that take place in both developed and developing states. Every country considers these factors as facilitators of economic growth. Therefore, demand for technical and engineering specialists is increasing steadily. In April 2023, in

his public speech at the first meeting of the Kazakh National Council for Science and Technology our President Kassym-Jomart Tokayev highlighted the necessity of launching strong research centers and institutes specializing in natural sciences, engineering, technology, social and humanitarian sciences [2]. At the same time, a year before, in January 2022, at the meeting of the lower house of the Parliament, Kassym-Jomart Tokayev had emphasized a greater priority of technical specialties over humanitarian ones, stating that it was a high time to bring up a new generation of engineers and industrialists in the state [3]. Since then, branches of some prominent foreign technical universities have been set up on the basis of local technical universities: a branch of the Polytechnic University of Marche (Italy) at Zhetysu University named after I. Zhansugurov, a branch of Hong Kong City University at Satbayev University, a branch of the Northwestern Polytechnic University (PRC) at Al-Farabi Kazakh National University, Higher School of Artificial Intelligence and Computer Science of Seoul National University of Science and Technology at Kyzylorda University named after Korkyt ata and Tianjin Professional University's Lu Ban workshop on joint training of technical personnel in the field of road transport at East Kazakhstan Technical University named after D.Serikbayev [4].

All these efforts in building up international connections and exchange of expertise are aimed at strengthening the effectiveness of higher engineering education in the Republic of Kazakhstan. To increase the quality of education technical universities in our country are following a competence-based approach which implies creating a graduate's profile from a set of competences needed for a particular specialist and providing further training to form the prescribed competences. The competency framework of a future specialist in technical universities of Kazakhstan includes "intercultural communicative competence" as a mandatory component in accordance with the State compulsory standard of higher education of the Republic of Kazakhstan as of July 20, 2022, in which "Foreign language" is declared as a compulsory university discipline. In light of the boosted international cooperation with foreign universities, intercultural communicative competence gains greater significance for technical university students.

Moreover, as defined in SES, to improve the quality of professional training and take into account the specifics of the areas of personnel training, universities are allowed to independently elaborate the content of the "Foreign Language" discipline. However, having analyzed syllabuses of "English language" disciplines in various technical universities of Kazakhstan, one can figure out that they are generally aimed at developing the four language skills (reading, listening, writing and speaking) and enrichment of vocabulary and grammar within general, academic and professional contexts without following any particular model justified scientifically and empirically. In this regard, the purpose of this research paper is to create and propose a model of formation of intercultural communicative competence of technical university students based on consideration of the existing scientific approaches in this field, as well as demands and trends of the modern world.

As stated by Rawboon et al. (2021) in today's global context, engineers are required to demonstrate not only their technical competencies, but they must also possess relevant global competencies in order to succeed in the international workplace. According to these scholars, the ability to apply more than one foreign language in communication and

implementing other job responsibilities comes along with other basic engineering competencies and their importance is not undermined [5].

### **Materials and methods**

To achieve the objective of the study both theoretical and empirical methods have been applied. The exploited theoretical methods include: literature review, analysis, synthesis, induction, deduction, specifying, analogy and comparing. Works on the structural components of the intercultural communicative competence by both local and foreign scholars have been reviewed and analyzed in order to provide a comprehensive approach to addressing the research problem. What is more, modern tendencies in foreign language education have been brainstormed and articulated. Then, taking into account these conceptual findings as well as the authors' own experience in the field of ELT, a model of the formation of technical students' intercultural communicative competence was developed.

Thus, the empirical method used in this research is a modelling method. Nowadays the modelling method is used almost in all sciences, and pedagogy is not an exception. According to Zhunussova, Althonayan & Golovchun (2020), in the field of foreign language education modelling can be applied in multiple ways and within different scopes:

- to model the entire system of foreign language education by formulating the theory and practice of teaching;
- to model the process of foreign language acquisition;
- to model the methodology of a training system;
- to model communicative acts and situations [6].

According to the new dictionary of methodological terms and concepts by E.G. Azimov and A.N. Shchukin, a model (from French "modèle", Latin "modulus" – a measure, a sample) "in a broad sense means "a simplified mental or symbolic image of an object or system of objects, used as their "substitute" and a means of operating (including training)" [7].

In this article we consider didactic modelling of the formation of technical university students' intercultural communicative competence by identifying its main components (subcompetences) and conditions necessary for the model's proper realization. Besides, we offer a set of principles and conditions of the formation of technical university students' intercultural communicative competence using a Situated Language Teaching (SLT) educational technology.

Moreover, as defined by Mikhailova (2023) modelling in foreign language education is a process of designing not only the learners' intercultural professionally-communicative activity, but also its content [8]. Following this valuable methodological instruction, we have also conducted a thorough analysis of the existing ESP coursebooks aimed at engineering and technical students and professionals in order to formulate recommendations on the content of situated assignments for curriculum developers.

### **Results and discussion**

Nowadays there are dozens of different definitions of the notion "intercultural communicative competence". Especially opinions vary across countries and regions, as

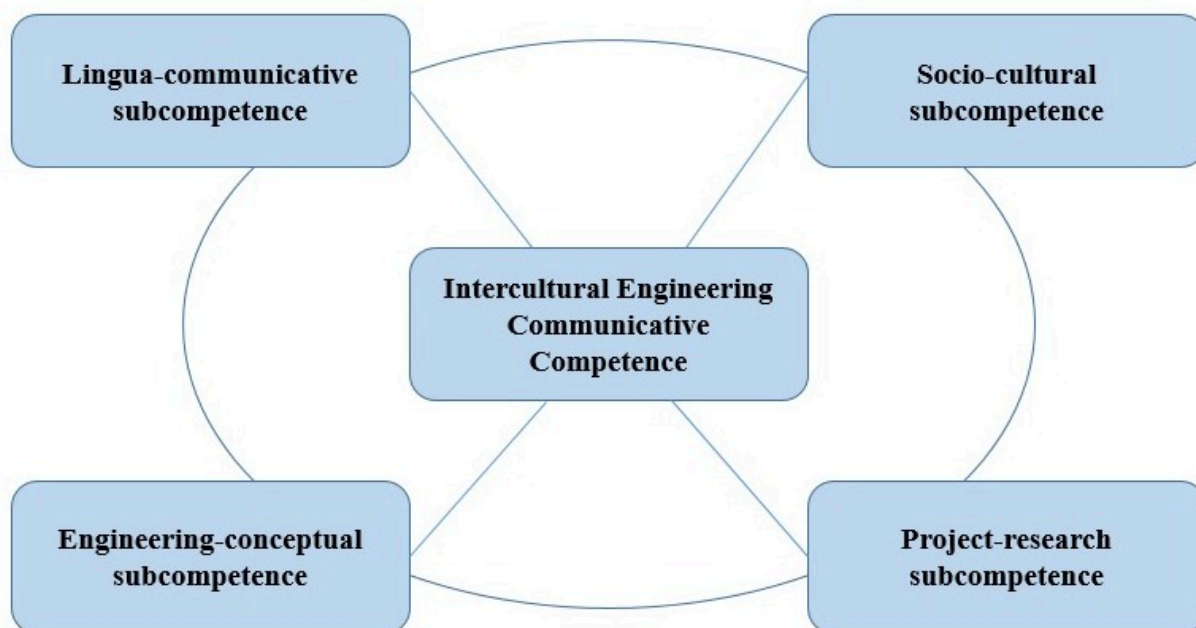
well as numerous linguistic and methodological schools within them. For example, Western authors emphasize mainly the intercultural component and often relate intercultural communicative competence to the concept of “Intercultural Communication”. Meanwhile, methodologists from Post-Soviet countries view intercultural communicative competence as a broader and more complex phenomenon which in its turn, alongside the ability of intercultural communication incorporates a collection of various interrelated components, such as linguistic, socio-cultural, strategic and other particular subcompetences. Moreover, in the Western sources and literature what we call “intercultural communicative competence” (hereinafter – ICC) is usually expressed as “foreign language competence”. However, the founder of Kazakhstani paradigm of foreign language education Professor S. Kunanbayeva derives that ICC is not a structural component of a so called “foreign language communicative competence”, but vice versa, it can be viewed as an autonomous competence that has its own subcompetences. Based on a thorough analysis of the approaches and definitions of such scientists as Jan Van Eck, S. Savignon, D. Himes, L. Bachman and D. Kulibaeyva, she defines the following components as part of ICC: cognitive, conceptual, linguocultural, communicative, person-centered, social and sociocultural subcompetences [9].

It is also known that scholars from the neighboring Russia denote ICC as a set of the following subcompetences: cognitive, linguistic, verbal, sociocultural, educational and compensatory. Whereas European scientists split it into linguistic, sociolinguistic, sociocultural, discursive, strategic and social subcompetences [10].

Taking S. Kunanbayeva’s concept as a basis and considering our own methodological and teaching experience, we would like to introduce a new notion regarding the engineering students’ ICC – “Intercultural Engineering Communicative Competence” (henceforth – “IECC”) – which we define as a holistic complex of knowledge, abilities and skills necessary for the effective professional communication in the foreign language in various engineering situations and comprising lingua-communicative, socio-cultural, engineering-conceptual and project-research subcompetences (see Picture 1).

We specify lingua-communicative subcompetence of the IECC as the ability to partake freely in the communication process in the target language both verbally and non-verbally within international engineering context. It includes the ability to exploit correct grammatical forms and syntactic constructions. The learners should be capable of recognizing semantic units in the speaker’s speech which are organized in compliance to the existing norms and rules of a foreign language.

Socio-cultural subcompetence of the IECC can be determined as a complex of knowledge about the cultural and national characteristics of the states of the target language. The learners are expected to distinguish between general and specific features in both the linguistic and cultural sense. The awareness of differences and peculiarities of both the native and the foreign culture equips the students with the ability to effectively communicate both verbally and non-verbally in intercultural settings. Moreover, social component helps to vary the communication style and approach depending on social characteristics of the interlocutor(s).



Picture 1 – Structural components of the Intercultural Engineering Communicative Competence

Engineering-conceptual subcompetence of the IECC implies the understanding of how various engineering concepts work and applied. Proper knowledge of this concepts is considered as very beneficial for the process of acquiring professionally-oriented foreign language, as it encourages better understanding of technical terms and grammatical patterns used is a variety of professional situations.

Project-research subcompetence of the IECC encompasses skills of conducting research and project-management in engineering fields in the target language within international settings. All the engineering jobs are technology-driven and depend on new scientific developments and research. It is crucial for any type of engineer to be capable of planning and conducting experiments as well as sharing the results of these studies with the public. Nowadays engineers encounter the necessity to participate in various engineering projects which are mostly of international character – therefore, they have to be aware of project-management procedures and be able to implement them in at least one internationally recognized foreign language, most often English.

In our stance, alongside subcompetences, a comprehensive model of ICC should include the following: a content block, a methodological block, a procedural block, an assessment bock and the expected outcome. The model of technical university students' ICC designed by the authors of this article is presented in Table1.

Table 1 – Model of the formation of technical university students' intercultural communicative competence

MISSION
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Aim: to form students' Intercultural Engineering Communicative Competence (IECC) as an intrinsic aspect of their professional and personal development by training a specialist capable of using English in various intercultural professionally oriented situations.			
Components (subcompetences) of technical students' IECC			
Lingua-communicative subcompetence	Socio-cultural subcompetence	Engineering-conceptual subcompetence	Project-research subcompetence
<b>CONTENT BLOCK</b>			
Subject content of the educational process			
<ol style="list-style-type: none"> <li>1. Intercultural engineering lingo-cultural modules</li> <li>2. Situations of intercultural and professional communication in engineering fields</li> <li>3. Educational and methodological complex of the discipline «English for Engineering» for technical university students</li> </ol>			
<b>METHODOLOGICAL BLOCK</b>			
Methodological approaches			
<ol style="list-style-type: none"> <li>1. Competence-based approach</li> <li>2. Learner-centered approach</li> <li>3. Communicative approach</li> <li>4. Intercultural approach</li> <li>5. Interdisciplinary approach</li> <li>6. Project-based approach</li> <li>7. Research-based approach</li> </ol>			
Principles of Situated Language Teaching for the formation of IECC			
Didactic-psychological principles	Linguistic principles	Methodological principles	
<b>PROCEDURAL BLOCK</b>			
Pedagogical conditions necessary for IECC formation			
<ul style="list-style-type: none"> <li>– aiming at increasing the level of motivation of students to learn a foreign language;</li> <li>– considering the individual characteristics and traits of students;</li> <li>– application of modern pedagogical and coaching technologies;</li> <li>– the use of new information and communication technologies;</li> <li>– level-based distribution of students into groups;</li> <li>– development of educational materials based on authentic sources;</li> <li>– grading the language to the students' level while elaborating educational materials;</li> <li>– interdisciplinary nature of the content of educational programs suitable for a wide range of engineering specialties.</li> </ul>			
Procedures			
Pre-course procedures	On-course procedures	After-course procedures	
Stages of IECC formation			
Intention formation	Information accumulation	Integrative application	Creative Production
<b>ASSESSMENT BLOCK</b>			
Indicators of IECC formation			
Emotive motivation	Subject knowledge	Situational application	
Levels of IECC formation			
Zero IECC	Low IECC	Intermediate IECC	Advanced IECC
<b>OUTCOME</b>			
An engineering specialist with IECC formed capable of using English in his/her professional communication within multiple engineering subfields and international environment.			

The content block of the suggested model should include the following mandatory component: intercultural engineering lingo-cultural modules identified through the preliminary needs-analysis; a set of situations of professional and intercultural communication in engineering fields; educational and methodological complex of an ESP discipline for technical university students, containing lesson plans designed in accord to the Communicative Language Teaching methodology.

We believe that Professional English (notion common in Post-Soviet states) or as it is denoted internationally - English for Professional Purposes – should be taught to future or acting engineers within professional situations close to the real work environment. This methodology is called Situated Language Learning. Having analyzed many articles dedicated to this methodology we formulate the following definition: Situated Language Teaching (hereinafter – SLT) is an educational technology that aims at immersing the learners in real-life situations, or the ones that are very similar to them in their features, in the process of foreign language acquisition. Modelling such kind of authentic situations for engineering students can be carried out by applying different interactive language teaching approaches, namely: Competence-based approach, Learner-centered approach, Communicative approach, Intercultural approach, Interdisciplinary approach, Project-based approach and Research-based approach. It should be stipulated that in order to suit the SLT methodology, all these approaches should be of experiential nature, allowing the learners to practice the newly gained engineering subject matter in authentic professional situations. Hereby we refer to the educational philosophy of a prominent educationist of the 20th century John Dewey, who wrote extensively about the importance of practicing concrete and meaningful real life situations in a classroom based on the on the principle of learning by doing [11]. A similar opinion has been expressed by S. Ter-Minasova, who notes that in order to teach a foreign language as a means of communication, it is necessary to create an environment of real communication, establish a connection between teaching foreign languages and real life, and actively use foreign languages in natural situations [12]. As advocated by recent findings of Ng.Clarence, language learning engagement in itself is a naturally experiential, situated and reflective process when considering it from the perspective of learners’ emotional lived experience [13].

As far as the pedagogical principles of the SLT educational technology are concerned, we group them up in three dimensions as follows:

1. Didactic-psychological principles:

- the principle of a student’s consciousness and autonomy;
- the principle of students’ engagement and active participation;
- the principle of visualization (using visual aids);
- the principle of proper assimilation of the studied material and skills;
- the principle of accessibility and feasibility;
- the principle of systematicity and consistency;
- the principle of practical orientation;
- the principle of interdisciplinary relationship and coordination;
- the principle of intercultural interaction;
- the principle of research-based approach;
- the principle of professional competence of the instructor.

2. Linguistic principles:

- the principle of linguistic systematicity, which considers language as a systemic formation consisting of interconnected elements of different levels, united into a single whole;



- the principle of concentricism, which provides for such a nature of selection and introduction of lexical and grammatical material that ensures repeated access to already studied material with its gradual expansion;
- the principle of language functionality;
- the principle of stylistic differentiation, meaning the importance of taking into account in the learning process the linguistic and speech characteristics of different speech styles;
- the principle of gradation (minimization) of language [14].

### 3. Psychological principles:

- the principle of motivation;
- the principle of phasing in the formation of speech skills and abilities, which determines the dynamics of changes in the structure of speech activity in the learning process;
- the principle of considering the individual psychological characteristics of students;
- the principle of taking into account adaptation processes;
- the principle of career guidance and coaching.

To form the proposed subcompetencies of IECC, it is necessary to comply with certain pedagogical conditions, which comprise a set of factors that influence the achievement of the goals and objectives of teaching a foreign language at a technical university. We propose the following pedagogical conditions:

- organization of the educational process aimed at increasing the level of motivation of students to learn a foreign language;
- taking into account the individual characteristics (cultural, ethnic, linguistic, psychological) of students in the process of teaching a foreign language;
- the use of modern pedagogical and coaching technologies in the process of teaching a foreign language, which will contribute to the self-development of the student's personality;
- the use of new information and communication technologies in teaching a foreign language in order to diversify the forms of the educational process and thereby increase the level of interactivity and learner engagement;
- level-based distribution of students into groups depending on their level of foreign language proficiency in accord to the standards of the Common European Framework of Competences (hereinafter - CEFR) in order to ensure a comfortable and effective educational process;
- development of educational materials based on authentic sources, taking into account the level of foreign language proficiency of each group of students;
- interdisciplinary nature of the content of educational programs in a professionally oriented foreign language, applicable for a wide range of engineering specialties.

In our formation model of the engineering students' ICC we define three sets of important procedures as follows:

#### Pre-course procedures:

- Mandatory in-depth pre-course analysis of the learners' needs and the educational entity's facilities.
- Designing the engineering ESP course based on the principles of ESP elaboration methodology.

On-course procedures:

- Involvement of interactive teaching methods and educational technologies, namely: Situated Language Teaching, Task-Based Learning, Project-Based Learning, Problem-Based Learning.

- Combining online and offline modes of study by the application of various e-learning tools and platforms.

- Providing regular feedback to the learners.

- Carrying out ongoing assessment.

- Exploiting a variety of available visual aids at both offline and online classes.

- Conducting a midterm test to evaluate students' current progress as well as the effectiveness of the methodology and programme being applied.

After-course procedures:

- Conducting final exam to evaluate the level of students' IECC formed after having studied this course.

- Getting students' and the instructors' feedback on the course via a questionnaire - for identifying further steps in improving the course (Optional).

- Forming a final report including assessment statistics and SWOT analysis.

Thus, formation of technical university students' IECC requires a step-by-step action plan on the educators' part. As far as the students are concerned, we suggest that they should undergo four consecutive stages to get their IECC fully formed:

1. Building up a clear and concrete intension to acquire a foreign language (can be achieved via applying coaching mission-setting techniques "SMART" and "Dilt's Pyramid").

2. Accumulation knowledge (information) on the target language – both linguistic and cultural.

3. Integrative application of the acquired knowledge in practice.

4. Creative production of own oral utterances and written discourse in various engineering situations.

Furthermore, we distinguish three groups of indicators of the technical students' IECC formation:

1. Emotive motivation: a combination of cognitive, motivational and reflective abilities necessary for learning a foreign language in the engineering context.

2. Subject knowledge: awareness and understanding of linguistic and socio-cultural peculiarities of the target language, as well as of the basic engineering, research and project-management concepts.

3. Situational application: the ability to apply the acquired knowledge and skills of the target language and the engineering, research and project-management concepts in various professional situations.

These indicators are assumed as intrinsic to all the four subcompetences of technical students' IECC.

The effectiveness of the designed model of the IECC formation has been tested via a pedagogical experiment conducted at Satbayev University. Overall 60 students took part in the experiment split in 2 experimental and 2 control groups. The former have been taught applying the proposed model and its underlying SLT technology. Whereas in the latter

traditional FLT methodology was exploited. The pre-test levels of both the control and experimental groups were almost the same. However, the post-test results of control and experimental groups vary significantly as shown in table 2.

Table 2 – Post-test levels of IECC of control and experimental groups

Indicators of IECC formation	Levels					
	Low IECC		Intermediate IECC		Advanced IECC	
	CGs*	EGs*	CGs	EGs	CGs	EGs
Emotive motivation	59%	9%	27%	65%	14%	26%
Subject knowledge	45%	11%	47%	55%	8%	34%
Situational application	57%	8%	34%	62%	9%	30%
<i>Average indicator</i>	<i>54%</i>	<i>9%</i>	<i>36%</i>	<i>61%</i>	<i>10%</i>	<i>30%</i>

\*CGs – control groups

\*EGs – experimental groups

Thus, the comparative analysis of the obtained statistical data proves noticeable superiority of the SLT methodology over traditional FLT in the formation of IECC of technical university students. As only 9% of learners possess low IECC after the experiential teaching, whilst the same low level is inherent in more than a half (54%) of the control groups. Meanwhile, around 91% of students in experimental groups have managed to form intermediate and advanced levels of IECC as a result of experiential training, whereas less than a half (46%) of the control groups have achieved these levels.

### Conclusion

In today's global context, graduates of technical specialties have to demonstrate not only their technical expertise, they must also possess crucial global competencies to succeed in the international environment. The authors of this article believe that the Intercultural Engineering Communicative Competence is one of these essential global competences as it equips technical university students with important lingua-communicative, socio-cultural, engineering-conceptual, project-management and research skills necessary for effective foreign language communication in the multinational workplace. The formation of IECC should be considered as a systematic holistic step-by-step process based on particular didactic principles and methodological approaches. The paramount focus has to be placed on the application of various interactive techniques and methods that immerse learners in real-life professionally-oriented situations. The formation model of Intercultural Engineering Communicative Competence put forward in this article has proved its efficiency over a traditional Professional English teaching. This model can be used in other universities or colleges educating technical and engineering students.

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## **ТЕХНИКАЛЫҚ УНИВЕРСИТЕТ СТУДЕНТТЕРІНІҢ МӘДЕНИЕТАРАЛЫҚ КОММУНИКАТИВТІК ҚҰЗЫРЕТТІЛІГІН ҚАЛЫПТАСТЫРУ МОДЕЛІ**

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**Аңдатпа.** Осы мақалада техникалық мамандықтар бойынша жоғары курс студенттерінің мәдениетаралық коммуникативті құзыреттілігін қалыптастыру моделі қарастырылған. Шетел тіліндегі коммуникативтік құзыреттілігін дамыту бойынша әртүрлі концепциялардың негізгі

ерекшеліктері қарастырылады. Өзекті мәселе бойынша әртүрлі ғылыми-теориялық әдеби дереккөздер талданады. Осы талдаудың және авторлардың ағылшын тілін оқыту саласындағы өз тәжірибесінің негізінде «мәдениетаралық инженерлік коммуникативті құзыреттілік» түсінігінің анықтамасы тұжырымдалып, оның құрылымдық құрамдас бөліктері ұсынылады. Осылайша, лингво-коммуникативтік, әлеуметтік-мәдени, инженерлік-концептуалды және жобалық-зерттеушілік қосалқы құзыреттер ажыратылып, түсіндіріледі. Сонымен қатар, техникалық университет студенттерінің ситуативті тілдік оқыту (SLT) технологиясын қолдану арқылы мәдениетаралық коммуникативті құзыреттілігін қалыптастырудың принциптері мен шарттары ұсынылады. Авторлар болашақ инженерлердің мәдениетаралық коммуникативті құзыреттілігін дамытуда ситуативті тілдік оқыту қолданудың негізгі принциптері мен спецификалық ерекшеліктерін анықтады. Өзірленген шеңберде жағдаяттық тапсырмалар әртүрлі нысандарда жүзеге асырылуы мүмкін, оның ішінде кейс-стади, проблемалық және жобалық оқыту, рөлдік ойындар, модельдеу және т.б. қоса алғанда және олармен шектелмейді. Техникалық студенттердің мәдениетаралық инженерлік коммуникативті құзыреттілігін қалыптастырудың жобаланған моделі эксперименталды түрде тексерілді. Бұл мақалада Satbayev University университетінде жүргізілген педагогикалық эксперименттің нәтижелері де көрсетілген. Бұл зерттеудің нәтижелері зерттеушілерге, оқу бағдарламаларын әзірлеушілерге және шет тілін оқыту саласындағы, әсіресе ағылшын тілін оқыту саласындағы мұғалімдерге пайдалы болуы мүмкін.

**Тірек сөздер:** мәдениетаралық коммуникативті құзыреттілік, тілдік емес мамандықтар үшін ағылшын тілі, инженерлер үшін ағылшын тілі, техникалық ағылшын тілі, арнайы мақсаттағы ағылшын тілі, шет тілін оқыту, шет тілінің коммуникативтік құзыреттілігінің қосалқы құзыреттері, құзыреттілікке негізделген тілді оқыту

## **МОДЕЛЬ ФОРМИРОВАНИЯ МЕЖКУЛЬТУРНОЙ КОММУНИКАТИВНОЙ КОМПЕТЕНТНОСТИ СТУДЕНТОВ ТЕХНИЧЕСКОГО ВУЗА**

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**Аннотация.** В настоящей статье рассматривается модель формирования межкультурной коммуникативной компетенции студентов технических специальностей университета. Рассмотрены существенные особенности различных концепций развития иноязычной коммуникативной компетенции. Анализируются различные научно-теоретические литературные источники по актуальной проблеме. На основе проведенного анализа и собственного опыта авторов в области обучения английскому языку сформулировано определение понятия «Межкультурная инженерная коммуникативная компетенция» и предложены ее структурные компоненты. Таким образом, выделяются и объясняются лингво-коммуникативная, социо-культурная, инженерно-концептуальная и проектно-исследовательская субкомпетенции. Кроме того, предложены принципы и условия формирования межкультурной коммуникативной компетенции студентов технических вузов с использованием технологии ситуативного обучения языку (СОЯ). Авторы определили основные принципы и особенности использования СОЯ в развитии межкультурной коммуникативной компетенции будущих инженеров. В рамках разработанной структуры ситуационные задачи могут реализовываться в различных формах, включая, помимо прочего, кейс-стади, проблемное и проектное обучение, ролевые игры, симуляции и т.п. – если они реализуются в соответствии с принципами и условиями предложенной модели. Разработанная модель формирования межкультурной инженерной коммуникативной компетенции студентов технических специальностей прошла экспериментальную апробацию. В данной статье

представлены результаты педагогического эксперимента, проведенного в Satbayev University. Результаты этого исследования могут принести пользу исследователям, разработчикам учебных программ и преподавателям в области преподавания иностранных языков, особенно английского языка.

**Ключевые слова:** межкультурная коммуникативная компетенция, английский для неязыковых специальностей, английский для инженеров, технический английский язык, английский для специальных целей, обучение иностранному языку, субкомпетенции иноязычной коммуникативной компетенции, компетентностное обучение языку

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