ABSTRACT

to the dissertation work of Kalkayeva Aizhan Bitimbayevna on the topic "Formation of intercultural communicative competence of technical university students using professionally-oriented situations", submitted for the degree of Doctor of Philosophy (PhD) in the educational program "8D01705 – Foreign language: two foreign languages"

Relevance of the research topic. The research topic is relevant due to the presence of legislative and strategic prerequisites aimed at training competitive specialists in the technical field by developing a set of professional competencies, including the skills and abilities of foreign language communication in an international professional environment. In strategic documents on the development of education and human capital, including the state strategy "Kazakhstan-2050" and the Law of the Republic of Kazakhstan "On Education", emphasis is placed on improving the quality of training specialists capable of effectively functioning in the context of global scientific and technological integration and intercultural interaction.

Modern engineering activity is increasingly international in nature and involves continuous engagement with foreign-language information sources, participation in international projects, professional communication, and academic mobility. Under these conditions, foreign language proficiency acquires not an auxiliary but an instrumental and professional character and becomes an integral component of an engineer's professional competence.

At present, there is a steady increase in demand for professionally oriented foreign language training across various fields of technical knowledge. However, existing approaches to the formation of professionally oriented foreign language competencies remain fragmented and do not sufficiently account for the specifics of training students in technical specializations, particularly in terms of intercultural professional communication and the modeling of real-life production and communication situations.

Thus, the relevance of the present study is determined by the need to develop a scientifically grounded and methodologically supported model for the formation of intercultural communicative competence (hereinafter – ICC) in students of technical specializations, enabling them not only to perform general communication in English but also to act as subjects of professionally oriented intercultural communication in the engineering field.

The relevance of the study is further reinforced by the presence of the following scientific and pedagogical contradictions between:

– the increasing requirements for the level of intercultural and professionally oriented foreign language training of future engineers and the insufficient development of methodological models for its systematic formation in technical universities;

– the need of educational practice for teaching technologies approximating real conditions of professional intercultural communication and the predominance of

traditional forms and methods of foreign language instruction focused mainly on general communicative skills;

– the necessity to consider industry-specific features and professional communicative needs of students and the insufficient use of needs analysis results in designing the content of professionally oriented foreign language courses;

– the potential of situational pedagogical technologies in developing ICC and the insufficient degree of their systematic methodological adaptation to the conditions of training students of technical specializations;

– the need for a staged and structurally organized formation of ICC and the lack of comprehensive didactic models that include a structure of sub-competencies, stages of formation, and a system of situational tasks.

The identified contradictions determined the choice of the research topic and shaped its scientific framework.

Object of study – foreign language educational process at a technical university.

Subject of research – methodology for the formation of the ICC of students of technical specialties.

The aim of the study is to theoretically substantiate, develop and experimentally test the effectiveness of the model for the formation of the intercultural communication skills of students at a technical university using professionally-oriented situations.

The dissertation sets the following objectives:

– to analyze and summarize the scientific and theoretical foundations of the formation of the ICC of students of technical specialties in the system of professionally-oriented foreign language education.

– to identify and substantiate the linguodidactic foundations for the use of professionally-oriented situations in the process of developing the intercultural communication skills of students in technical specialties.

– to develop a model for the formation of the ICC of students of technical specialties using professionally-oriented situations, by defining its structure, principles, conditions and stages of its formation.

– design the subject content of teaching a professionally-oriented foreign language for technical specialties based on subject-thematic unities reflecting current areas of engineering activity.

– conduct experimental training to experimentally test the effectiveness of the developed model for the formation of the ICC of students in technical specialties.

– based on the obtained results, analyze the effectiveness of the proposed model for the formation of the ICC of students in technical specialties and formulate methodological recommendations.

Research hypothesis. The formation of students' ICC in technical fields will be more effective **if** the learning process is built on a didactically guided model, and situational teaching technology is used as the primary technology. This develops students' readiness and ability to use a foreign language for professional purposes, **as** a

competency-based, integrated-interdisciplinary, and intercultural approaches are implemented.

Leading research idea. The efficiency of the formation of ICC of technical university students is determined by the use of professionally-oriented situations that model their future engineering work.

Research methods. Literature review on this area of research; a critical analysis of various points of view and concepts from other scholars, current educational programs, and educational and methodological complexes in the field of foreign language education developed for technical specialties; observation method; an online survey among graduates of technical specialties; a modeling method; experimental learning; testing method; evaluation and comparison of test results; analysis of the obtained results.

Research sources. Works of Kazakh and foreign scientists on the topic of the dissertation research; regulatory and conceptual documents; ESP coursebooks («Cambridge English for Engineering» by M. Ibbotson, «Market Leader» by D. Cotton, D. Falvey, «Professional English in Use: Engineering. Technical English for Professionals» by S. Kent, M. Ibbotson); diagnostic instruments designed by the author and borrowed, including online-platform EF Standard English Test; results of online questionnaires on MS Teams Forms platform; materials and results of the pedagogical experiment.

Theoretical and methodological basis of the study:

– cognitive-linguacultural methodology and theory of ICC, developed by S.S. Kunanbaeva together with a group of Kazakhstani scientists;

– the theory of competence-based approach in foreign language education (M. Byram, L.S. Vygotsky, A.A. Verbitsky, A.N. Leontyev, A.T. Chaklikova, I.A. Zimnyaya, etc.);

– the concept of communication-oriented learning using situational technology (E.I. Passov, A.N. Shukin);

– «Needs analysis» – a methodology for determining educational needs in the study of foreign language (T. Dudley-Evans, M. St. John, H. Basturkmen, H. West, M. Long, G. Brindley, D. Nurmetov, etc.);

– «English for Specific Purposes» – conceptual methodology for developing educational programs in professionally oriented foreign language (N. Hutchinson, A. Waters, A.Q. Dou, S.H. Chan, M.T. Win, D. Kovačević, etc.);

– modeling methodology (S.S. Kunanbaeva, V.A. Shtoff, Yu.I. Tarsky, D.N. Kulibaeva, E.N. Gusinsky, A.A. Golovchun, etc.).

Scientific novelty of the dissertation:

– the subcompetencies that form the core of technical university students' ICC have been studied and defined;

– the pedagogical potential of using professionally-oriented situations in developing technical university students' ICC has been identified based on an extensive literature review;

– a methodological model for developing technical university students' ICC, that includes content, methodological, procedural, and criterion-based assessment components, has been developed using situational learning technologies;

– based on the results of a survey of technical university graduates the subject content of teaching a professionally oriented foreign language for technical specialties has been designed;

– a matrix of situational exercises and tasks for the development of technical university students' ICC, including original, adapted and borrowed exercises and tasks, has been developed;

– criteria for assessing the formation of technical university students' ICC for low, intermediate, and high levels have been elaborated.

The main provisions of the dissertation work:

1. The development of the intercultural communication skills of students in technical specialties using situational technology is a mandatory component of their professional training in the context of the internationalization of engineering activities and should be considered as a purposefully organized process in the system of professionally oriented foreign language education, ensuring readiness for intercultural professional interaction.

2. The structure of the ICC of students of technical specialties is represented by a set of interconnected subcompetencies: motivational-emotive, linguistic, engineering-knowledge, socio-cultural and situational-communicative, formed in a single didactic system.

3. The effectiveness of the formation of the ICC is ensured by the implementation of a set of pedagogical conditions, including increasing the learning motivation of students, taking into account individual and personal characteristics, the use of situational technology, digital and coaching tools, level-based differentiation of training, the use of authentic materials and an interdisciplinary professional focus of the content.

4. The organization of professionally oriented foreign language education at a technical university is based on a set of mutually complementary principles: emotive-cognitive motivation, lingua-communicative focus of training, socio-cultural awareness, engineering conceptualization of content and situational-applied organization of the educational process.

5. The developed model is a didactically controlled system that includes motivational-orienting, linguistic-accumulating, intercultural-accumulating, integrative-modeling and situational-producing stages.

6. The results of the experimental testing confirm that the implementation of the developed model based on professionally oriented situations statistically and pedagogically significantly increases the level of formation of the ICC of students in technical specialties.

Theoretical and practical significance of the study. The results of this dissertation contribute to the development of theory and methodology for teaching foreign languages, particularly in the area of developing students' intercultural

communication skills, by clarifying its structure as it applies to students majoring in technical disciplines and substantiating a professionally oriented, situational approach as the foundation for its development. The study expands scientific understanding of professionally oriented foreign language teaching by theoretically substantiating and structuring the model for developing students' intercultural communication skills in technical disciplines.

The research findings have been integrated into the educational process and reflected in the course's teaching and methodological complex on a professionally oriented foreign language for students in technical specialties, confirming their practical relevance and reproducibility in teaching practice. The materials and methodological solutions developed as part of the study can be used by foreign language teachers, educational program developers, authors of teaching and methodological complexes, and in the professional development of teaching staff.

Research base: KazNRTU named after K.I. Satbayev (Satbayev University), Department of Foreign Languages, Institute of Project Management named after E. Turkebayev.

Testing and implementation of research results. The main scientific results and conclusions of the research were published in one article in a journal indexed in the Scopus database, in three articles in scientific journals recommended by the Science and Higher Education Quality Assurance Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan, and in six articles in the proceedings of international scientific and practical conferences:

The educational and methodological complex "English for Engineering" was published and implemented into the educational process at K.I. Satpayev Kazakh National Research Technical University. The corresponding implementation certificate has been received.

Structure of the dissertation. The dissertation consists of an introduction, three chapters, a conclusion, a list of references and appendices.