

Foreign language communicative competence of future IT specialists: the essence and main characteristics

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Annotation. The article is devoted to the actual problem of professional pre-higher education – the study of the essence and structure of professional foreign language communicative competence of future IT specialists. Compilation of the research source base and its analysis confirms that this problem is considered from different perspectives by domestic and foreign researchers. The purpose of the article is as follows: to summarize the previous work of researchers and, on this basis, define its essence, determine and characterize its structural components. The professional foreign language communicative competence of an IT specialist is interpreted as a qualitative characteristic of his personality, based on a system of scientific and theoretical knowledge and practical skills in the field of professionally oriented communication by means of foreign languages, as well as a stable motivation for its implementation. Three components (the motivational, cognitive, activity) of its structure are determined and characterized. The motivational component encompasses the presence of conscious, stable interests and needs determines the result of mastering rather complex and diverse foreign language material and the skills of its practical application in the process of professional communication in the IT environment. The cognitive component is reflected in the complex of knowledge about the foreign language system as a means of professional communication, the possession of units of a foreign language, professional terminology, grammatical constructions the rules of their use the specifics of professional foreign language communication, the sociocultural knowledge, the etiquette of communicative behavior, styles and forms of communication. The activity component determines their ability to successfully communicate in the professional space by means of a foreign language.

Keywords: foreign language, competence, communicative competence, professional foreign language communicative competence, IT specialist, IT sphere, pre-higher education.

Іншомовна комунікативна компетентність майбутніх ІТ-фахівців: сутність та основні характеристики

Анотація. Стаття присвячена актуальній проблемі фахової передвищої освіти – дослідженню сутності та структури фахової іншомовної комунікації майбутніх фахівців ІТ галузі. Укладання джерельної бази дослідження та її аналіз підтверджує, що ця проблема розглядається з різних перспектив вітчизняними та зарубіжними дослідниками. У контексті нашого дослідження особливостей формування іншомовної комунікативної компетентності ІТ-фахівців в умовах фахової передвищої освіти

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визначено мету: узагальними результатами попередніх напрацювань дослідників і на цій основі визначити її сутність, розкрити та охарактеризувати його структурні компоненти. Визначено професійну іншомовну комунікативну компетентність ІТ-фахівця як якісну характеристику його особистості, що ґрунтується на системі науково-теоретичних знань і практичних умінь у сфері професійно орієнтованого спілкування засобами іноземних мов, а також стійкої мотивації до його виконання. Враховуючи особливості професійної діяльності в ІТ-галузі та специфіку іншомовного професійного спілкування ІТ-фахівців, розглянуто професійну іншомовну комунікативну компетентність здобувача цієї професії як динамічну систему знань, умінь, навичок, цінностей, переконань, що є основою раціонального сприйняття та конструктивної передачі професійної інформації іншомовними засобами. Визначено мотиваційний. Когнітивний, діяльнісний компоненти у структурі професійної іншомовної комунікативної компетентності ІТ-фахівця. Мотиваційний компонент охоплює наявність усвідомлених, стійких інтересів і потреб, визначає результат оволодіння досить складним і різноманітним іншомовним матеріалом і вміннями її практичного застосування в процесі професійної комунікації в ІТ-середовищі. Когнітивний компонент професійної іншомовної комунікативної компетентності охоплює комплекс знань про іншомовну систему як засіб професійного спілкування (одиниці іноземної мови, професійна термінологія, граматичні конструкції, соціокультурні знання, етикет комунікативної поведінки, стилі та форми спілкування). Діяльнісний компонент професійної іншомовної комунікативної компетентності ІТ-фахівців визначає їхню здатність успішно спілкуватися у професійному просторі засобами іноземної мови.

Ключові слова: іноземна мова, компетентність, комунікативна компетентність, професійна іншомовна комунікативна компетентність, ІТ-фахівець, ІТ-сфера, фахова передвища освіта.

Introduction

The realities of life in today's world, marked by intensive integration processes, the activation of international contacts, the destruction of territorial boundaries and communication barriers thanks to innovative digital technologies, have become catalysts for improving the theory, methodology, and practice of teaching foreign languages on a global scale and at all levels of the education system, in particular professional. The active search in scientific and pedagogical circles of Ukraine and abroad for new ideas and approaches to teaching foreign languages to future specialists in various fields of production and industry, including the IT sphere, with the aim of ensuring their full preparation for successful foreign language professional communication. in the conditions of the modern open world is the convincing evidence of this.

The modern conditions of professional activity in the IT industry focus on cooperation in multinational and multilingual teams, and therefore require knowledge of foreign languages as the main means of understanding in professional environment. In this context, scientists [20; 23; 27] indicate the need to master English as the language of international communication, the proper level of which is recognized today as one of the key attributes of high professionalism of an IT specialist. Knowledge of this language serves as the basis for establishing contacts between specialists from various countries of the world, joining international IT communities and overcoming cultural and language barriers in the process of teamwork on international projects.

Therefore, the professional success of an IT specialist in the current conditions of the open labor market is directly dependent on the level of his foreign language knowledge and skills, which make it possible to achieve communicative goals, and therefore to effectively perform professional roles and functions in a globalized multilingual professional environment. Therefore, we consider the proposal of scientists [5; 10; 12; 14; 26] to consider mastery of

foreign languages as one of the key professional, business and personal qualities of IT specialists in view of the trends of its globalization and the resulting need for cooperation with developers of IT products and consumers of IT services from different countries of the world.

The analysis of recent research and publications. The problem of foreign language competence formation is not new. It is the subject of scientific discussions of domestic [6; 9; 10; 12], as well as foreign [17; 18; 25] researchers. It should be noted that it is studied from different perspectives [1; 3; 7; 14; 16; 19; 22; 24; 26], and most importantly from the perspective of the professional environment in which the foreign language communicative competence of a modern specialist should be realized [2; 4; 21] etc.

In the context of the pronounced specificity of the IT industry, I. Nazarenko [7] defines the essence and component composition of the foreign language communicative competence of its employees. Taking into account the peculiarities of professionally oriented communication of IT specialists, she interprets their English language competence as a prerequisite for successful professional self-realization in the conditions of the current globalized IT market and defines it primarily as the ability to carry out effective communication in situations of professional communication with foreign fellow programmers, customers and software users for the purpose of exchanging professionally relevant information [7].

It is worth mentioning the researcher's approach to distinguishing the key components of foreign language professionally oriented communicative competence of IT specialists, in particular:

1) linguistic, which is manifested in the presence of language knowledge and skills, namely phonetic, lexical, grammatical;

2) sociolinguistic or sociocultural, which is reflected in the ability to use and transform units and structures of a foreign language in accordance with situations of foreign language professional communication;

3) subject matter, which provides a meaningful basis for foreign language professional communication;

4) psychological, embodied in the skills and abilities of adequate perception of interlocutors and confident positioning of oneself among communicators;

5) educational and strategic, which is reflected in conscious and effective self-management during the acquisition of skills and experience in English-language professional communication [7].

The ideas regarding the essence and component composition of foreign language professional communicative competence of IT specialists [22] seem to be valuable within the scope of our research. According to their beliefs, the essence of professional foreign language communicative competence of IT specialists lies in an integrated system of value attitudes, language knowledge and speaking skills, which together provide the possibility of realizing professionally directed communicative intentions in various situations of professional activity. This competence, researchers believe, serves as a foundation for building a constructive professional dialogue with colleagues or clients – representatives of other linguistic and cultural communities.

According to this comprehension of the essence of professional foreign language communicative competence of an IT specialist, scientists single out four key components in its structure, namely:

1) motivational, which includes persistent internal needs in professional foreign language communication and the desire to constantly improve one's own foreign language knowledge and skills;

2) cognitive, which includes knowledge about the phenomena and units of all levels of a foreign language – lexical, grammatical, phonetic – and the norms and rules of their use;

3) activity, which is manifested in the ability to perceive others and to construct one's own statements on professional topics using foreign language in oral and written form;

4) reflexive, which is reflected in the skills of self-control and self-evaluation of the results of one's own foreign language-oriented professional activity and competence [22].

The formulation of article purpose. In the context of our study of the peculiarities of the formation of foreign language communicative competence of IT specialists in the conditions of professional pre-higher education, we consider it appropriate to summarize the previous work of researchers and, on this basis, define its essence, determine and characterize its structural components.

Results

When substantiating the requirements for foreign language knowledge and skills of IT specialists, the aforementioned researchers quite naturally proceed from the needs of their direct professional practice, the peculiarities of communicative activity within its limits. Professional activity in the IT sphere as a process of developing and operating various technologies for processing, generating, transmitting, and storing information requires not only proper professional knowledge and skills, but also professional communication skills. The specific features of the professional activity of an IT specialist are inextricably linked with communication, including foreign language, and involve working with text information, scientific and reference literature, formalizing communication, interaction with colleagues and clients from different countries of the world in the conditions of an open labor market and IT services.

Considering the essence of foreign language training of IT specialists, researchers quite naturally proceed from the needs of their direct professional practice, the peculiarities of communicative activity within its limits, and the specifics of professional speech in the IT sphere. Such features usually include: verbal character, frequent indirectness, informativeness, official-business style, versatility, saturation with special terminology, dialogicity and monologicity, combination of oral and written forms, compliance with the norms of speech etiquette, etc. These features of the implementation of professional foreign language communication of IT specialists cause special requirements for the formation of their foreign language communicative competence as a complex system of various types of linguistic knowledge and speech skills.

The analysis of research results on the problem of the essential characteristics and structural features of the professional foreign language communicative competence of IT specialists shows the unanimity of scientists in recognizing it as an integral indicator of their high professionalism and qualification, which makes it possible to realize their needs in the exchange of professional information and promotes their mobility in global context. At the same time, the presence in the scientific and pedagogical literature of different interpretations of the essence of professional foreign language communicative competence of specialists in the IT industry and various interpretations of its component composition indicates the unsolvedness of this issue, as well as the difficulty of its final solution due to the complex nature of the corresponding pedagogical phenomenon, which involves a wide variety of elements or components. Therefore, in their works, scientists offer their own vision and understanding of the professional foreign language communicative competence of an IT specialist through the prism of their immediate research goals and tasks.

In the context of our research, we consider it appropriate to interpret the professional foreign language communicative competence of an IT specialist as a qualitative characteristic of his personality, based on a system of scientific and theoretical knowledge and practical skills in the field of professionally oriented communication by means of foreign languages, as well as a stable motivation for its implementation. Taking into account the peculiarities of professional activity in the IT industry and the specifics of foreign language professional communication

among IT specialists, we consider the professional foreign language communicative competence of the acquirer of this profession as a dynamic system of knowledge, abilities, skills, values, beliefs, which serves as the basis of rational perception and constructive transmission professional information using foreign language means.

The essence of the professional foreign language communicative competence of an IT specialist is primarily the possession of comprehensive knowledge of professional communication taking into account the specifics of the industry and the experience of qualified and effective foreign language professional communication, which together make it possible to function successfully in a specific professional environment, in particular, to establish professional contacts, exchange information, coordinate their actions in the process of teamwork, etc., taking into account the diversity and variability of relationships between colleagues, customers, partners.

In our opinion, the professional foreign language communicative competence of a specialist in the IT industry is not just the sum of individual theoretical knowledge and practical skills in the field of professional communication in a foreign language, but an integrated multi-level and multi-component system that combines specialized knowledge and skills in a foreign language with personal values, needs, motives, with the aim of conscious, systematic application of relevant knowledge and skills for the organization and implementation of professional communication. This interpretation of the essence of the professional foreign language communicative competence of an IT specialist, in our opinion, most fully corresponds to the specifics of their professional activity in general and professional foreign language communication in particular.

Based on the results of previous studies and our own understanding of the essence of the professional foreign language communicative competence of IT specialists, we consider it appropriate to single out in its structure motivational, cognitive and activity components that are organically connected with each other (Fig. 1.).

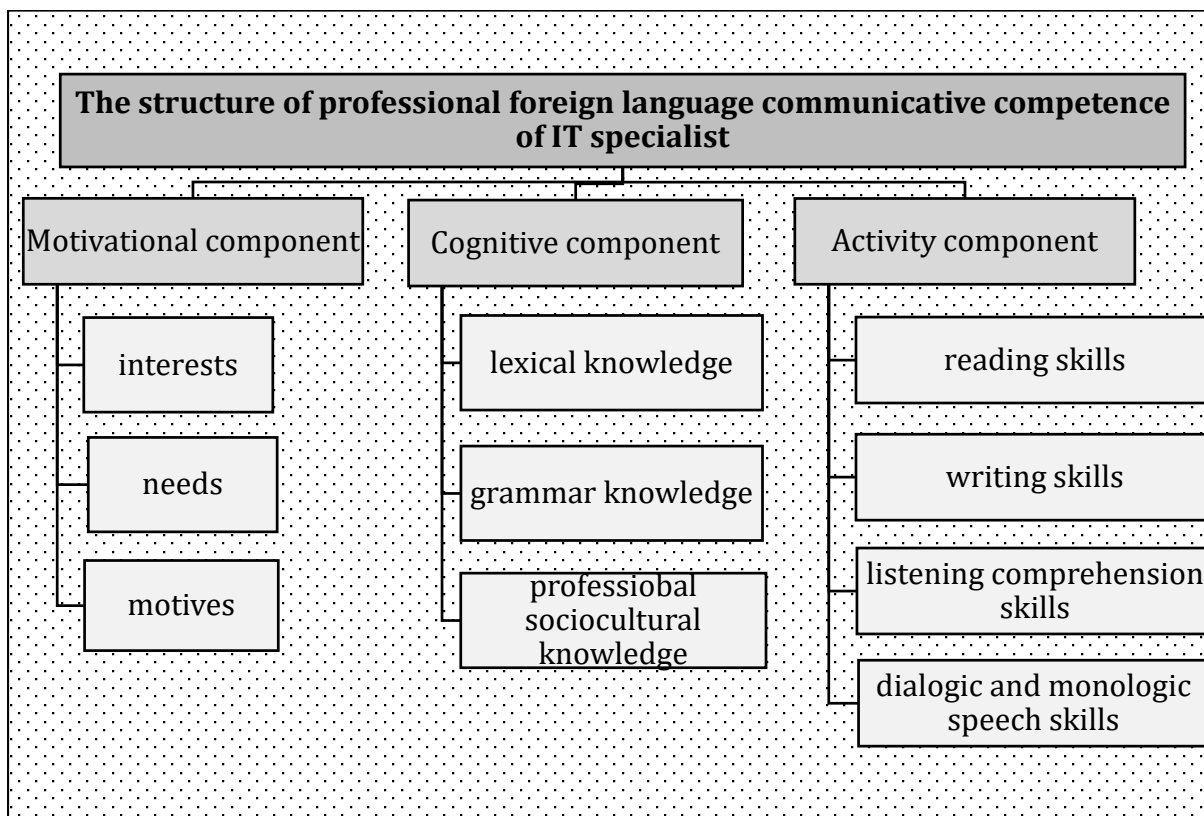


Fig. 1. Components of professional foreign language communicative competence of IT specialists

Motivation is, in our opinion, the driving force of the process of learning a foreign language by IT students. It is primarily based on the awareness of the importance of mastering it as one of the key tools of professional self-realization and significant expansion of professional prospects, for example, completing foreign internships, communicating with foreign colleagues, working in international IT companies, access to foreign language scientific and technical sources, etc. The presence of these motives encourages students – future IT specialists to expand their knowledge of a foreign language and master the forms of foreign language communication typical for the professional IT community.

The motivational component in the structure of professional foreign language communicative competence of future IT specialists plays a key role, because first of all, the presence of conscious, stable interests and needs determines the result of mastering rather complex and diverse foreign language material and the skills of its practical application in the process of professional communication in the IT environment. It provides purposefulness, initiative, decisiveness, perseverance, readiness for self-control and willful efforts, which guarantee the successful course and effectiveness of mastering a foreign language as a means of foreign language professional communication.

The cognitive component of the professional foreign language communicative competence of the future IT specialist is primarily reflected in the complex of knowledge about the foreign language system as a means of professional communication. It is manifested in the possession of units of a foreign language, especially professional terminology, grammatical constructions that are characteristic of foreign IT discourse, and the rules of their use in professional foreign language speech. The specifics of professional foreign language communication in the IT environment also require inclusion in this component of the complex of sociocultural knowledge, in particular regarding the influence of social factors of the professional IT environment on the selection of foreign language means, the etiquette of communicative behavior, styles and forms of communication acceptable within the IT community, etc. Thus, this component includes a rather wide range of theoretical knowledge about the means, types, methods of foreign language professional communication in the IT environment.

In the end, the activity component of the professional foreign language communicative competence of IT specialists determines their ability to successfully communicate in the professional space by means of a foreign language. It is reflected in their willingness to constructively use a foreign language in situations of professional communication in order to realize various communicative intentions and goals. Given the specifics of foreign language professional communication in the IT environment, the activity component includes:

- the ability to read and adequately understand foreign language professional texts;
- the ability to produce foreign language expressions on professional topics in written form in accordance with the norms of business professional communication;
- the ability to perceive and adequately understand oral foreign language expressions of professional direction;
- the ability to produce monologues in a foreign language in professionally significant genres (presentation, instruction, description, etc.);
- the ability to initiate, maintain, and complete a dialogue on a professional topic in compliance with the rules of business etiquette, etc.

Conclusions

Therefore, on the basis of the theoretical analysis of the source base of the research, it is proved that the professional foreign language communicative competence of an IT specialist should be interpreted as a qualitative characteristic of his personality, based on a system of scientific and theoretical knowledge and practical skills in the field of professionally oriented

communication by means of foreign languages, as well as a stable motivation for its implementation. The research determined the components of the professional foreign language communicative competence of IT specialists (motivational, cognitive, activity) that are organically interconnected and form a set of motives, knowledge, and skills that ensure the readiness and opportunity to study, work and communicate in the current globalized, multilingual IT environment, and achieve mutual understanding with colleagues or clients who speak different languages and cultures. This structure of the determined competence, which is based on a close relationship of foreign language knowledge, speaking skills, a valuable attitude to professional foreign language communication, an awareness of the motives for its implementation, most fully, in our opinion, reflects the ability of an IT specialist to perform productive oral communication and in written forms in a foreign language on various professional topics.

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