



DOI: 10.54919/physics/55.2024.100kg0

Pragma-professional communicative competence of IT students in the Kazakhstani context

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Abstract

Relevance. The relevance of the work is due to a high degree of interest in terms of achieving effective communication in the education of IT professionals for the purpose of active pragma-professional and communicative intercultural integration and digitalization of the world through the involvement of modern information technology.

Purpose. The purpose of this article is a comprehensive study of all parameters: social, psychological, linguistic, affecting the communicative competence of the student involved in the IT-industry, the development of linguocognitive mechanisms that contribute to the effectiveness of the dialogue in small and large groups (teams) on the example of the Kazakh experience.

Methodology. The methodological basis was a theoretical, comparative and sociometric study of the main tasks, principles, rules of competent conduct of interpersonal and intercultural dialogue, the study of pragmatic aspects of building personality with a high level of communicative competence and practical application of knowledge in the course of training.

Results. This article analyzes the key aspects of the IT-sphere development in Kazakhstan in terms of modern conditions of digitalization of professional activity of specialists, considered the main aspects of the influence of the level of communicative competence on the results of work in this industry, shows the main methods of formation of pragma-professional competence on the example of foreign language training, communication in internal and external teams and increasing the staff potential, competitive in the international labor market.

Conclusions. The materials presented in this article can be used in the study of IT-communication on the example of other state mechanisms for implementing a communication strategy to improve the effective and comfortable work of employees, the development of planned methods related to improving the communicative competence of students and employees of information technology, the study of the specific organization of work in advanced IT companies, primarily from the perspective of the communicative aspect.

Keywords: information technology; educational discourse; interlanguage integration; speech strategy; human capacity; digitalization.

Introduction

The relevance of the topic of this article is due to the high interest in the problems of IT-learning (information

technology) in the aspect of improving the effective work abroad, in the implementation of practical communication skills in the workforce, because the success in the IT-

Suggested Citation:

Zhaiykbay K, Kulgildinova T. Pragma-professional communicative competence of IT students in the Kazakhstani context. *Sci Herald Uzhhorod Univ Ser Phys.* 2024;(55):1000-1008. DOI: 10.54919/physics/55.2024.100kg0

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sector, primarily depends on the integration of communicative competence in the professional environment. A detailed and complex study is aimed at tracing the main relationships between different participants in communication: student and teacher, employee and employer, IT-sector employee and customer, project manager and programmer. Communicative competence provides the development of a strategy for solving communicative tasks, evaluation of the communicative skills of the person interlocutor depending on the speech situation, the possession of different ways of communication, the ability to choose communication tactics when changing the psychological state of the speech opponent [1; 2]. In order to maintain a proper dialogue, it is necessary to learn the rules of interpersonal communication, including verbal and written communication, to use verbal and nonverbal mechanisms to maximize the effectiveness of communication and obtain the necessary results at the end of the discussion. The basis of communicative competence is to communicate with people of different genders, ages, sociocultural categories, and at different levels: interpersonal, collective, international, business, or everyday [3].

O. Luchaninova et al. [4] believe that student's pragma-professional communicative competence is formed during group work, because such communication allows tracking the thoughts of the interlocutor, solving problematic problems through active discussion, teaching dialogue ethics. In the course of such training the student learns to listen to different points of view, to prepare questions and counterarguments, which is a necessity in terms of achieving positive results in collective work. According to J. Sapoetra [5], pragmatic competence should be considered in terms of learning a second language, with linguocultural aspects and the formation of bilingual competence (identifying objects in different languages and building relationships between lexical units with the same meaning, studying the shades of meaning in the source and target languages) playing a fundamental role. The author studies some aspects of pragmatic competence: implicature (search for hidden meanings of an utterance), precondition (inference based on truth), speech acts (performatives and statements), communication and sociocultural communication.

S. Askarova et al. [6] deals with the study of problems in the educational system of Kazakhstan, including those associated with changes due to globalization, considers new educational technologies based on conceptuality, consistency, systematicity, availability, responsiveness in the development of information and technological processes, shows that the psychological tension of communication is reduced when using information technology. P. Kropachev et al. [7] uses a complex approach in the study of digitalization of education in the Republic of Kazakhstan, pointing out the main challenges and problems in communication in social messengers, developing an algorithm of educational technologies built on non-standard approaches to solve communication problems aimed at the development of logic and intelligence of students.

The goal of this article is to study the main aspects of IT students' competence in the Kazakhstani context based

on the development of communicative and pragma-professional teaching practices in higher education institutions, to identify key characteristics and problems of IT sector development in Kazakhstan and comprehend the ways and methods to maximize international cooperation and increase human resource potential. The subject of the study is the system of IT-education in Kazakhstan, the communicative practice of interaction between students, teachers, as well as at the level of international socio-cultural dialogue.

Materials and Methods

The methodological basis of the article is based on the theoretical study of the main aspects related to communicative and pragma-professional competences, key areas of work in IT sphere, specifics of the educational process in Kazakhstan, formation of communicative discourse in the field of IT training. The methods of science-pedagogical research (for example, analytical-synthetic, inductive-deductive method), comparative, sociometric method were also used, based on which the study of specific features of Kazakhstan IT-specialists training, ways of achieving work efficiency through formation of various competences in students were considered. The theoretical basis of this article is compiled from the works of modern international and Kazakh communicative linguists, psycholinguists, sociologists, who in their works make sense of the key communicative processes in professional activities, including in the pragmatic aspect. With the help of analytical-synthetic method the main positions existing in the international practice in relation to the formation of key competences of the student in pragmatic discourse were formulated.

At the first stage of writing the research was processed various studies related to the identification of key characteristics of technological education and the impact of digitalization on cognitive processes, linguistic, pragmatic and content side of communicative competence, the formation of pragmatic competence in learning a second language and the nature of bilingual processes, the study of semiotic modes, socio-cultural factors and interlingual mechanisms of implementation of communicative competence.

In the second stage of the article the study of IT-specialists training in the higher school of Kazakhstan, specifics of implementation of pragma-professional activity and building communicative competence in modern conditions was carried out. Using the method of analyzing the results of students' activities the main mechanisms of building and effective learning were deduced, the structure and importance of interlanguage integration as one of the main components of building communication with different socio-cultural, national, linguocultural and psycholinguistic groups were considered. The inductive-deductive method allowed implementing the research strategy of transition from the particular to the general, i.e. the idea of IT-learning in Kazakhstan pushed away from the conclusions about individual students and universities to the characteristics and mechanisms of IT-sphere development in the Kazakhstani space as a whole.

The sociometric method was based on the study of the style of relations in the professional team, including

communicative tactics and strategies when conducting a dialogue both in the internal team and in international interaction with customers. With the help of comparative method it became possible to compare methods of formation of pragma-communicative competence on the basis of international experience and to allocate key features at communication and development of communicative skills of students of Kazakhstan higher educational institutions.

At the final stage of writing this article, key conclusions were formulated based on the results of the work, and the main vectors of further developments in terms of the development of communicative competence at different levels were also outlined. Also, new themes and problems that may arise in modern intercultural discourse (in terms of communication between students, employees, customers in the IT-industry) in the near future were named.

Results

Progressive development of the IT market in Kazakhstan requires building an ecosystem of the IT sector, that is, the creation of a competitive environment of IT companies and IT professionals. The current state program "Digital Kazakhstan" puts a key focus on the development of institutional aspects with the involvement of international resources. The priority is to build a technology park and provide "soft" conditions to attract foreign investment and specialists, but the problem remains the shortage of manpower and human capacity in this field of knowledge. Support of IT laboratories and co-working centers on the basis of universities will allow to implement strategies to attract Kazakhstani and international speakers to promote the IT sector. Increasing the quantity and quality of IT personnel training and improving Kazakhstan's positioning in this area depends on developing a strategy for effective training and state support in this regard. At this point, the country already needs to take appropriate measures to adapt to the growing needs of the industry. In support of science and education, efforts should be focused on STEM (science, technology, engineering and mathematics) support, encouraging IT companies to cooperate with higher education institutions [8; 9]. In the field of information technology development in Kazakhstan should:

- accumulate financial resources for scientific research, both through budget funds and special funds;
- to encourage the development of information technologies, including applied technologies;
- to coordinate integration processes in terms of combining different types of technologies;
- stimulate demand for innovative developments by providing funds for state orders;
- to support competition in the market by attracting investments;
- create special programs for training, promoting the growth of highly qualified personnel;
- to form a scientific and innovation infrastructure;
- regulate the situation in the international market in accordance with its targeting and demands [10-12].

Factors in the formation of communicative culture are divided into external and internal, the first are the result of social interaction with the outside world, and the second

are representative of the personal characteristics of each person. The most important in the learning process is the experience of communication at the interpersonal level in the macro group, so in order to realize the communicative potential of future IT-specialists it is important to organize the educational process in such a way as to ensure the interaction of the institution providing education with other social and educational institutions. The communicative culture of IT specialist consists of the following elements: experience in conducting communicative activities, capacities, abilities and skills, value orientations and norms of behavior, personal traits and psychological features. Today there is a need to develop innovative technologies for the formation of communicative culture of student youth in Kazakhstan [13]. The competence approach is focused on the process of student activity, aimed at the formation of a conscious personality, while students are active members of the learning process, not passive listeners. The organization of educational activities of IT specialists in Kazakhstan should be based on the following points:

- activation of thought processes in the search for optimal solutions for a particular task in the course of communication with colleagues;
- Increasing self-learning, for example, when solving problem problems and studying complex information systems;
- searching for new methods on the basis of the obtained skills with the use of knowledge in programming, algorithms and database management systems;
- providing cognitive and cultural development of students in tandem with the study of basic technological disciplines [14].

To form the communicative competence of IT-specialist in the Kazakh context should provide an organic combination of different characteristics that contribute to the realization of professional goals through communication with other participants in the communication process, the study of different means, methods and principles of communication, the formation of skills of human-machine interaction. Communicative competence of IT-specialist provides three main aspects: cognitive, interactive and perceptive. Cognitive aspect is the process of learning the means and ways of dialogue in the team, interactive provides the organization of the process of interchange of information, perceptive aspect provides an understanding of the normative and technical features of the interaction between human and machine [15; 16]. The first principle in the implementation of communicative competence is the integration of teaching a foreign language and professional training, the second principle is the integration of professional knowledge in the process of teaching a foreign language. The interdisciplinary integration involves the use of information technology, didactic materials in teacher training. Interaction of interpersonal and special communication in the professional field helps to form the most important components of communicative competence in the sphere of business communication and to enter the international arena. In foreign language education in IT sphere pragmatic communicative competence is formed as a result of a step-by-step process through being prepared for international professional

communication and solving professional tasks in the sphere of integrated special education. The basic foreign language course should be integrated with the professional English course, which will further create the basis for the professional English course [14; 17].

Foreign language education with implementation of personality-based approach creates all conditions of pragmo-professional communicative competence, in the course of such training a student is considered as a subject of pedagogical activity with orientation on future professional activity. Technological approach is aimed at achieving educational goals in terms of forming a cycle of operations performed in algorithmic order, is used in different aspects of educational, pedagogical and social reality. Using this method, it is possible to predict the results obtained in the course of pedagogical processes with a high degree of accuracy, systematize the scientific base and accumulated practical experience, as well as ways to use it in the future, solve social and educational problems on its basis, improve conditions for education and harmonious development of personality. Pragmo-professional competence in IT training in Kazakhstan, first of all, provides the ability to correctly use the language in different contexts and with different interlocutors, taking into account cultural, social, individual factors directly or indirectly influencing the choice of who enters into a communication process, as well as the limitations associated with communicators in social interaction. Students should understand and be able to interact at six levels of pragmatic competence: stylistic, formal, interactive, thematic, organizational, and action level. Knowledge of the grammatical features of a particular language and its structural characteristics is currently insufficient for the implementation of communicative tasks in this professional activity [14].

In the structure of the foreign language pragmo-professional communicative competence of an IT-specialist it is possible to distinguish the projective-functional subcompetence, which provides active promotion of the student's ideas, the ability to express his/her position during the discussion of the professional problem issue, defending their point of view, and also based on the discourse-industrial-professional subcompetence, which is aimed at learning the content-conceptual metalanguage of IT-sphere. In addition to professional orientation, the student learns to summarize, process the information received, draw accurate conclusions; formulate and express the functional purpose of intent, coordinate with the team and make decisions, build a logical chain based on the data obtained, learn to rationalize their inferences, support conversations and lead discussions. It is difficult for an IT specialist to navigate in professional terminology without knowledge of a foreign language; during active professional activity the student purposefully works on increasing his vocabulary, which gives him new pragmo-professional communicative opportunities in different industries. Thus, in the process of learning basic English with integration into the professional terminological IT system the formation of linguistic personality takes place. In foreign language teaching, attention should be paid not only to lexical relationships, but also to the correct grammatical structure of sentences, to involve audio and video materials, which

would demonstrate the branch specificity of the language. In order to accurately articulate their thoughts and be able to hold discussions, it is necessary to systematize and harmonize knowledge of a foreign professional language and promote understanding of branch-specific metalanguage [14].

Among the main personal qualities of an IT specialist: initiative, desire to be a leader, ability to avoid conflicts, flexibility, ability to independently solve strategic tasks in the shortest possible time, sustained interest in the profession, understanding of its social role, ability to respond to standard and non-standard situations, responsibility for decisions made, ability to work effectively in a team, communicate with colleagues, management, customers [18]. After successful completion of the training Kazakh students should be able to generate and accurately interpret information in a foreign language, determine the conceptual system of the speech opponent in terms of its socio-cultural and psychological features based on the analysis of its implementation of strategies and tactics during business communication, be able to build the process of communication in accordance with the schemes and rules of speech communication [17]. Currently, the main goal of Kazakh higher education is to train highly qualified specialists with prospects for professional growth, capable of responding quickly to technological changes in the process of rapid introduction of innovative equipment. There are many requirements for students in the field of IT:

- demonstrate knowledge and skills in information technology development;
- be able to learn and work in a team;
- have leadership skills;
- be trained in terms of working with software and web applications, including skills in programming, creating algorithms, and managing systems and databases;
- effectively self-train, such as taking continuing education courses;
- design software applications using appropriate frameworks and algorithms [14; 19].

The main criteria for the effectiveness of the IT-specialist is the transition in the process of professional activity to the experiential and creative levels. At first, activity in this area is perceived exclusively as exploratory, but later automatism is developed, knowledge and skills are accumulated, after which the professional activity will be perceived as an educational or algorithmic one. The next stages are accommodation, which involves changing action schemes, and assimilation, which involves including a new object into the existing schemes [15]. The implementation of the intercultural approach in business is only increasing every year, the rapid development of the IT sphere is due to the openness of the world and free access to information. At the same time, many cultures (Mediterranean, Central European, Latin American, African) today remain contextual, which involves active communication at the level of non-verbal signals and their interpretation, most German and English-speaking countries, on the contrary, strive for maximum explicitness and concreteness in the statements. The level of correlation between emotionality and rational meaning plays an important role in intercultural communication: members of neutral cultures do not show their feelings, while in affective cultures

people show their emotional state more actively during negotiations.

IT students in Kazakhstan have enormous opportunities for communication in the international arena, especially for project managers, technical directors, project managers, who have the main responsibility to conduct communication processes with the head office, the customer, the client or a potential partner [20]. Such pragma-professional communication is often indirect with the help of special software and remote communication technologies, but personal meetings are not the last place in this process [13; 21]. Today, Kazakhstan's IT market has all the political, social and economic prerequisites for active development, but the main problem is the lack of human resources with a high qualification level. This problem can be solved with the help of state funding of IT specialties, allocation of additional budget for the development of information technology, attracting foreign investment. The pragma-communicative aspect is key in terms of implementing international cooperation, expanding the client and scientific and technical base, international exchange of students from other countries and universities to acquire new experience in different IT fields.

Discussion

Communicative competence is most often considered as the ability to establish and maintain communicative processes, it implies a set of knowledge, skills and abilities that ensure effective communication between people. The sphere of communicative competence includes solving the communicative tasks, determining the purpose of communication, assessing the intention in a speech situation, development and use of different ways of communication, changes in speech strategy of behavior of the communicant in the process of discussion. It is conditioned by the rules and regularities of interpersonal communication, gives the ability to successfully enter into verbal and nonverbal, written contacts in order to implement various communicative tasks (information transfer, negotiation, installation and support of communication, persuasion). Communication depends on knowledge of the norms and rules of communication (business, casual, festive, etc.), the level of speech development, which allows you to competently convey information through the existing vocabulary and communication skills, understanding of non-verbal signs, the ability to enter into verbal contact with people of different categories (gender, age, socio-cultural), to communicate depending on the communication objectives and achieve communication goals, to change the interlocutor, appealing to the facts, events, the ability to properly assess [1; 22].

According to O. Luchaninova et al. [4], to master communicative competence it is necessary to use methods of group work, which are most effective in personal communication: for example, during the discussion students follow the idea of the interlocutor, seek information on problematic issues, listen to the opinion of another person without criticism and objections, the teacher can apply methods of brainstorming. Group work allows students to establish not only visual-ethical contact with another communicator, but also builds pragma-

professional communicative competence through specific thematic tasks. W. Reddy et al. [23] explores the role of measuring the core characteristics of technology education in the development of programs related to outcomes-based learning. The study proved that cognitive development occurred during the learning process, there were positive shifts toward social skills. Linguist Sh. Whyte [24] views communicative competence from three different perspectives: linguistic (traditional grammar, vocabulary), pragmatic (sociolinguistic awareness related to the rules of politeness and acceptability), and substantial (professional or scientific knowledge). A. Chala et al. [25] examine the theoretical rationale and implement experimental verification of the formation of communicative competence in future philologists, which involves a set of methodological, content, technological and diagnostic components.

The influence of pragmatic competence on communicative competence is best considered in terms of the aspect of second language acquisition. Since the linguistic system is an integral part of culture, in order to achieve communicative competence it is necessary to develop cultural and linguistic competence. In order to become a de facto member of a certain speech community, it is necessary to form the so-called bicultural competence (built on the basis of bilingual processes), i.e. when learning a second language, it is necessarily related to the first language already learned. Some aspects of pragmatic competence:

1. Implicature provides for the hidden meanings of an statement, since the verbal form is always smaller in volume from the speaker's statement itself, to bridge the gap between the thoughts and the linguistic embodiment, the distance between the listener's interpretive abilities must be minimized as much as possible.

2. A premise can be defined as an inference or suggestion whose truth is taken for granted, created through the use of certain lexical units and/or linguistic constructions.

3. Speech acts – actions performed in the process of speaking have both a descriptive and an action aspect (performatives and statements). Different statements can have different meanings and interpretations depending on the communicant.

4. Communicative competence emphasizes meaning, curriculum, student-centered (verbal, written, and sign communication), authentic language samples, and communicative processes in classroom instruction. Sociocultural competence correlates with the speaker's pragmatic knowledge through the ability to express in a social and cultural context [5; 26].

In a broad sense, pragmatic competence is defined as the ability to communicate properly in a social context, to use pragmatic functions in a specific setting to effectively achieve communicative goals. Since communication consists of various semiotic modalities: colloquial language, gestures, facial expressions, head movements, there is an opportunity to focus on multimodal pragmatics and show interlingual mechanisms of its realization. Colloquial language is an important, but far from the only resource used in communication, and failure to understand the basics of linguistic modus leads to a lack of understanding of interlingual pragmatic competence [27-

29]. T. Mao and Sh. He [30] provide a critical review of pragmatic competence research in communication ability theory, focusing on the functional-discursive, component, semantic, theory-relevant model, exploring the integrated model of pragmatic competence, focusing on interactions between various internal submodules and interactions with external socio-cultural factors. In an article by N.D.A. Simanjuntak [31] specifies some theoretical issues related to the role of pragmatic competence in meeting the challenges of the industrial revolution, multicultural awareness, social skills, and global awareness of the modern individual.

According to J. Hu et al. [32], context-dependent communication models often use the concept of articulating listeners' and speakers' thoughts in a collaborative reasoning process. The author believes that the architecture of the learning process should be built on the learning of pragmatic rules through self-control rather than through human imitation. Article Y.T. Rueda [33] is based on theoretical discussion about the introduction of explicit pragmatic learning as an additional tool for developing pragmatic competence in learning a foreign language. Researcher S. Askarova et al. [6] points out the problems that exist in the education system of Kazakhstan due to global changes, including the risks of the transition to the three-tier system of education and how important is the process of development of information and communication technologies and the introduction of new pedagogical technologies in the process of education. Educational technologies should be based on conceptuality, systematicity, consistency, manageability, feedback, reproducibility, availability, responsiveness. Information environment should be open type (different forms of distance learning), through the communication "student-computer-teacher" reduces the psychological tension of communication, informatization of learning allows you to increase teacher productivity [34-37].

P. Kropachev et al. [7] develops a complex approach to solving the problem of digitalization of education in the Republic of Kazakhstan, actualizing the problems in this area, forming priority tasks and methods of their solution, the problems of modern "digital" generation, its dependence on communication in social networks and messengers are touched upon. The author believes that to effectively educate young people in the future it is necessary to develop an algorithm of educational technology to form the ability to think outside the box, creatively approach problem solving, to develop logic and intellect. The analysis of scientific research regarding the problem of forming communicative competence of future IT specialists allows to form practical skills for solving problems and situations in a professional way, for self-improvement and development [18; 38]. Thus, modern research actively considers topics related to the development of information security, digitalization of learning, achievement of communicative goals and the formation of pragma-professional competence in the learning process of students. It is important to understand that the development of activities in the international community is possible only through the development of competent communicative strategies and tactics, careful study of the specifics of behavior and ethics of dialogue in any other country [39; 40].

Conclusions

Consideration and search for new methods of implementation of communicative strategy on the example of IT studies in Kazakhstan, allocation of key parameters of pragma-professional interaction between different socio-cultural groups, collectives, communities became possible due to analytical-synthetic, sociometric, comparative-analytical, methodological analysis of key criteria of IT communication. Using the theoretical method, the key postulates on which the concept of pragma-communicative competence is based, speech tools concerning the conduct of learning by introducing and practicing communicative practices of various kinds (for example, group work methods) were considered. Based on the methodology of analyzing students' performance, the fundamental points of interlanguage integration were derived.

This study analyzed the main aspects of IT development in Kazakhstan (lack of human resources with high qualifications, lack of sufficient state funding for IT development), considered the key problems and aspects of IT training in terms of developing new effective communication methods, including in the pragma-professional discourse. Key tasks for achieving effective results in this segment of the market were also formulated, the main technological changes were noted, and approximate ways of communicative response to the rapid development of innovative equipment (software, web applications, algorithms) were devised. Conclusions were formed on the basis of current trends in digitalization, including its impact on cognitive processes, the study of the linguistic, pragmatic and content side of communicative competence.

In practice, this article can be used to improve pedagogical methods of IT-specialists training, develop group work methods (discussions, debates), implement communicative strategy in interpersonal communication, as well as in the international arena, develop effective pragma-professional communication at different linguistic levels. The key areas for further research should be the following: the development of new methods for setting and solving communication problems, the study of the pragma-professional specifics of communication in the IT field on the example of the experience of different countries, the creation of a linguo-communicative strategy in international discourse.

Acknowledgements

None.

Conflict of Interest

None.

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Прагматично-професійна комунікативна компетентність студентів ІТ-спеціальностей у казахстанському контексті

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Анотація

Актуальність. Актуальність роботи зумовлена високим ступенем зацікавленості щодо досягнення ефективної комунікації в освіті ІТ-фахівців з метою активної прагматично-професійної та комунікативної міжкультурної інтеграції та діджиталізації світу через залучення сучасних інформаційних технологій.

Мета. Метою даної статті є комплексне дослідження всіх параметрів: соціальних, психологічних, лінгвістичних, що впливають на комунікативну компетенцію студента, залученого до ІТ-індустрії, розробка лінгвокогнітивних механізмів, що сприяють ефективності діалогу в малих і великих групах (командах) на прикладі казахстанського досвіду.

Методологія. Методологічною основою стало теоретичне, порівняльне та соціометричне дослідження основних завдань, принципів, правил грамотного ведення міжособистісного та міжкультурного діалогу, вивчення прагматичних аспектів формування особистості з високим рівнем комунікативної компетентності та практичне застосування знань в процесі навчання.

Результати. У статті проаналізовано ключові аспекти розвитку ІТ-сфери в Казахстані з точки зору сучасних умов цифровізації професійної діяльності фахівців, розглянуто основні аспекти впливу рівня комунікативної компетентності на результати роботи в цій галузі, показано основні методи формування прагматично-професійної компетентності на прикладі навчання іноземним мовам, комунікації у внутрішніх і зовнішніх командах і підвищення кадрового потенціалу, конкурентоспроможного на міжнародному ринку праці.

Висновки. Представлені в статті матеріали можуть бути використані при дослідженні ІТ-комунікації на прикладі інших державних механізмів реалізації комунікативної стратегії для підвищення ефективної та комфортної роботи співробітників, розробці планових методик, пов'язаних з підвищенням комунікативної компетентності студентів та працівників сфери інформаційних технологій, вивченні специфіки організації роботи в передових ІТ-компаніях, насамперед, з точки зору комунікативного аспекту.

Ключові слова: інформаційні технології; освітній дискурс; міжмовна інтеграція; мовленнєва стратегія; людський потенціал; діджиталізація.