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Rhetorical and virtual communication: innovative characteristics of future professionals' communication culture

Риторичне та віртуальне спілкування: інноваційні характеристики культури професійного спілкування майбутніх фахівців

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Abstract


The article clarifies the main characteristics of the culture of professional communication of future specialists and verifies the effectiveness of the implementation of the author's system of forming the culture of rhetorical and virtual communication of future specialists to enrich the professional experience of future specialists for professional activities. The content of research concepts is disclosed and the main aspects of the manifestation of the culture of professional communication of future specialists are highlighted, its main qualitative communicative characteristics, the most effective factors of professional communication of future specialists, and criteria of productivity of the style of professional communication of future specialists are proposed. The main aspects of the rhetoric of professional communication are emphasized.


Анотація


У статті з'ясовано основні характеристики культури професійного спілкування майбутніх фахівців та перевірено дієвість реалізації авторської системи формування культури риторичного та віртуального спілкування майбутніх фахівців з метою збагачення професійного досвіду майбутніх фахівців для фахової діяльності. Розкрито зміст понять дослідження та виокремлено основні аспекти вияву культури професійного спілкування майбутніх фахівців, її основні якісні комунікативні ознаки, найбільш дієві чинники професійного спілкування майбутніх фахівців та запропоновано критерії продуктивності стилю професійного спілкування майбутніх фахівців. Наголошено на основних аспектах риторики професійного спілкування. Показано вагомість віртуального професійного

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The importance of virtual professional communication of future female and male specialists with the active introduction of remote technologies into the system of modern education is shown. Exercises for the development of professional communication culture skills of future specialists are offered. The study confirmed the practicality of introducing the developed author's system of formation of the culture of rhetorical and virtual communication of future specialists into professional training.

Keywords: culture of professional communication, author's system of formation of culture of professional communication of future specialists, rhetorical and virtual communication, virtual professional communication, professional activity.

Introduction

Moral and emotional well-being, the effectiveness of professional activity, the influence of the culture of professional communication on the intellectual and personal development of future specialists, satisfaction with one's activity and oneself, professional growth of a specialist depend on the peculiarities of pedagogical communication and human culture (Haluziak, 2019).

For the professional communication of future specialists, one of the main means of professional training of future specialists is of great importance – language, which contributes to the development and formation of a person's personality, will, intellect, and feelings; the language preserves the spiritual essence of the people, unites generations, forms the culture of the nation, provides a national worldview.

The culture of professional communication of future specialists in any branch of the national economy is a measure of a specialist's education. Official negligence and linguistic negligence border. Incorrect or inaccurate use of a sentence or word in the text of the document can lead to misunderstandings in business relations, distortion of the content of the document, etc. Errors in instructions or technical designs can cause production failures. An interesting technical idea, scientific opinion needs a perfect rhetorical culture and virtual communication, as innovative characteristics of the culture of professional communication of future specialists and the linguistic form of the individual. Presented in a reasoned and competent manner, they quickly gain the support of the scientific community and society. The lack of an oral

спілкування майбутніх фахівців жіночої та чоловічої статі при активному запровадженню дистанційних технологій до системи сучасної освіти. Запропоновано вправи для розвитку навичок культури професійного спілкування майбутніх фахівців. Дослідження підтвердило доцільність впровадження у фахову підготовку розробленої авторської системи формування культури риторичного та віртуального спілкування майбутніх фахівців.

Ключові слова: культура професійного спілкування, авторська система формування культури професійного спілкування майбутніх фахівців, риторичне та віртуальне спілкування, віртуальне професійне спілкування, фахова діяльність.

culture of professional communication with future specialists hurts his relations with customers, clients, partners, etc. All employees should master the basics of professional communication, and linguistic means, paying attention to the features characteristic of official business and scientific styles (Kuchai et al., 2018).

Literature review

The problem of the styles of professional communication of future specialists, the main characteristics of the culture of professional communication, which stood out in a special direction of research in connection with the importance of human social relations, were dealt with by scientists from different countries and devoted several works in which the psychological structure and features of different styles of professional communication are analyzed communication, the features of virtual communication are considered, the impact on the personal development of the individual is determined; empirical studies will be conducted; gender differences in personal characteristics of young people are determined (Solodovnyk et al., 2019). He devotes his research to the consideration of speech aspects in the rhetorical aspect, of the business communication of O. Muntian (2023), where professional communication plays an important role in education, business, and politics. Rhetoric is presented as the art of persuading and influencing others, the importance of rhetoric in business communication and aspects of its use in the modern world are considered, as well as the role of linguistic and rhetorical means in the

perception of the world by recipients is emphasized. The correct choice of grammatical structures, lexical units, metaphors, and rhetorical figures in the perception of information by the audience and the formation of beliefs is shown. Stylistics is given the main attention in business communication, in important written communications the importance of formal style is shown and the correspondence of tone and style with the context of communication is emphasized. V. Haluziak (2019) implements O. Muntian's thoughts into the practice of business communication, and pays attention to the use of clear language, structuring the message, and the need for audience analysis. The scientist considers various approaches to the effective style of pedagogical communication, defines its characteristics; distinguishes bipolar parameters: "sympathy – antipathy"; "dominance – dependence"; "closedness – openness"; finds that "in addition to grammar and vocabulary, the structure of speech plays a crucial role in conveying information and maintaining a position".

O. Kovalenko (2015) studies the interpersonal communication of the elderly and singles out the content of scientific approaches of a concrete-scientific methodological level (concepts of interpersonal communication, personality theories, systemic, existential theory, and integrative approach). The scientist considered the personal-communicative approach and substantiated its principles and content in the development of conceptual representations of the process of interpersonal communication of elderly individuals, which are considered a conscious activity, a subject of subject-subject communication that makes up a system of interconnected different mental processes, dynamic unity. The model of "interpersonal communication of the elderly" was developed the structure of the components of interpersonal communication of persons of this age (behavioral, emotional, cognitive), communication mechanisms (sympathy, empathy, mutual understanding, constructive methods of interaction, reflection, identification, decentration), factors (external, internal), functions (informational-communicative, affective-communicative, regulatory-communicative), regularities related to the conditions, driving forces, features of improving the communication process.

It is interesting to study domestic and foreign experiences regarding the specified problem by S. Trehub (2020). The significance of the formation of a professional culture of

communication for future doctors has been investigated and proven. The importance of professional communication of future specialists for professions of the "Human–Human" type is proven, which requires its representative's tolerant, correct communication based on constructive dialogue, a high level of competence, professionalism, professional deontological culture, concentration, responsibility, based on moral and value guidelines and principles of humanism. An integral part of the professional formation of students of higher education, one of the aspects of development is the formation of a professional culture of communication, which is not limited to pedagogical influence on the individual but covers the significant ethical activity of the specialist in society.

The culture of language and professional communication of future specialists studies the approval and codification of norms at all language levels. Content and appropriateness of language, its accuracy, and logic, make human language exemplary, impeccable, and highly cultured. An important condition for success in professional growth is mastery of speech culture. Therefore, A. Starunova (2018) characterized the types and genres of speech: report and business report, anniversary speech, business speech, rally speech, and speech; highlighted the main aspects of the manifestation of culture in a professional speech specialist: adequacy, normativeness, field functionality, aesthetics; gave practical advice to improve the personal speech culture of the future specialist.

Naturally, the problem of professional communication styles of future specialists, the main characteristics of the culture of professional communication was highlighted in a special direction of research. Several works are dedicated to the study of the main characteristics of the professional growth of a specialist, the culture of professional communication, in which the psychological structure and features of various styles of professional communication are analyzed, the influence on the personal development of the individual is determined, and attempts at classification and systematization are made. Comparative studies of foreign experience regarding the specified problem are interesting. However, the basic characteristics of the culture of professional communication of future specialists, rhetorical and virtual communication, and innovative characteristics of the culture of professional communication of future specialists are not sufficiently substantiated.

The aim of the study. To find out the main characteristics of the culture of professional communication of future specialists and to check the effectiveness of the implementation of the author's system of formation of the culture of rhetorical and virtual communication of future specialists to enrich the professional experience of future specialists for professional activities.

Methodology

Achieving the goal and verifying the hypothesis formulated in the research (clarification of the main characteristics of the culture of professional communication of future specialists and verification of the effectiveness of the implementation of the author's system of forming the culture of rhetorical and virtual communication of future specialists will allow the enrichment of the professional experience of future specialists for their professional activities) was facilitated by the use of a set of methods: theoretical – content analysis of pedagogical, philosophical, psychological works, systematization, theoretical analysis, synthesis, concretization, extrapolation, typology – to reveal methodological foundations and theoretical-methodological ones with the aim of building a system of formation of a culture of rhetorical and virtual communication of future specialists, as well as interpretation of empirically obtained material; classification and comparative-pedagogical analysis of research – in order to clarify the essence of the categorical-conceptual field of research and scientific definitions; modeling and systematization – for the development of a system of formation of the culture of rhetorical and virtual communication of future specialists; selection of approaches, correction and design of theoretical and methodological positions, promising ideas that form the methodological and methodological basis of generalization, experimental data – for the development of educational and methodological support for the culture of professional communication of future specialists; empirical – pedagogical observation of the educational activities of higher education seekers, questionnaires, interviews, surveys, testing – with the aim of determining the state of readiness and formation of future specialists and establishing the positive dynamics of its formation; pedagogical experiment – to confirm the verification and efficiency, effectiveness of the developed system of formation of the culture of rhetorical and virtual communication of future specialists; with the calculation of the Fisher criterion (F-criterion), methods of mathematical statistics – for the presentation and processing of

research results, testing and analysis of hypotheses, establishing quantitative dependencies between the investigated processes in order to identify and organize the most important signs of professional readiness of professional communication of future specialists as a basis for a professional construct by an expert evaluation of the received data.

Research organization. The research was conducted in three stages.

The organizational and prognostic stage, which involved the analysis of scientific research and approaches to the formation of the culture of professional communication of future specialists, allowed finding out the achievements in the theory and practice of higher education; to define a conceptual apparatus based on a systematic analysis of psychological, pedagogical, philosophical literature on the problems of forming a culture of rhetorical and virtual professional communication of future specialists; definition of tasks, research tools (criteria, levels, indicators) for assessing the readiness of specialists; functions of education and methodological foundations of professional communication of future specialists; contributed to the development of the methodology of both theoretical and experimental research, specifying the purpose of the research.

The content-procedural stage involved the accumulation of empirical material on the formation of the culture of rhetorical and virtual communication of future specialists (confirmatory experiment); the definition of conceptual and methodological foundations for the research problem; development of a system for the formation of a culture of professional communication of future specialists; clarification of the chosen methods and hypothesis research; preparation and conduct of the formative stage of the experiment, which allowed to check the effectiveness of the system of formation of the culture of rhetorical and virtual communication of future specialists.

The analytical and corrective stages involved systematization, analysis, processing of the results obtained during the experiment, qualitative interpretation of the experimental data, statistical processing, and registration of the obtained results.

Results and discussion

1. The content of research concepts

Language and culture are on the same conceptual plane and spiritual values are organically connected. The word culture, which means education, care, and development, means a set of spiritual and material values that mankind has created throughout its history. Language is a manifestation of culture. "Language keeps in one spiritual field of national culture all representatives of a certain nation both on its territory and beyond its borders. It cements all cultural phenomena, is their concentrated manifestation" (Mukan et al., 2020). We preserve the national culture, nurturing the language, protecting its identity, and taking care of its development.

The culture of professional communication of future specialists involves compliance with word usage, emphasis, linguistic norms of pronunciation, construction of sentences, clarity, accuracy, purity, appropriateness and richness of speech, logical coherence, and compliance with the rules of speech etiquette (Fahnestock, 2020). The culture of professional communication of future specialists is "a complex socio-psychological phenomenon, which is one of the conditions for the formation and development of personality, effective interaction between people in all spheres of life, related to feelings, emotions, experiences, thoughts" (Solodovnyk et al., 2019).

The main aspects of the manifestation of the culture of professional communication of future specialists and its main qualitative communicative features.

The following main aspects of the manifestation of the culture of professional communication of future specialists are highlighted:

- adequacy (intelligibility and clarity of speech, accuracy of statements);
- normativity (compliance with the rules of written and oral communication);
- polyfunctionality (ensuring language use in various spheres of life).
- aesthetics (use of language (expressive and stylistic), which makes speech rich and expressive) (Kuchai et al., 2018).

The high culture of professional communication of future specialists in various fields means speaking skills and a perfect command of the

language in the process of communication (Molek-Kozakowska, 2020).

The main qualitative communicative features of the culture of professional communication of future specialists are accuracy, correctness, expressiveness, logic, appropriateness, meaningfulness, purity of speech, and richness of language (Schneller, 2021).

Accuracy is associated with the meaning of the word, clarity of thinking, with knowledge of the subject of speech. The ability to express thoughts and form them adequately is determined by knowledge of the language, a constant desire to learn about the real world, and knowledge of objective reality. If the words used fully correspond to their lexical meanings established in this period of language development, then the culture of professional communication of future specialists will be accurate. Accuracy is achieved not only at the lexical-semantic level, it is closely related to the syntactic, and grammatical levels; depends on the knowledge of one's profession, the speaker's intellectual level, wealth and erudition, his active vocabulary, the laws of his linguistic expression, mastery of the logic of thought.

Correctness is a defining feature of the culture of professional communication of future specialists. Language has its own laws of development, which are clearly reflected in language norms. To be fluent in the language and culture of professional communication means to learn exactly such literary norms that operate in the language system of professional communication of future specialists. These include the rules of stressing words, the correct pronunciation of sound complexes, sounds, writing by punctuation and spelling norms, and stylistic, grammatical, and lexico-phraseological normativity (Biočina & Rajh, 2021).

Expressiveness is a means of self-expression, the ability to use expressive means of sound speech: emotional tonality, voice inflections, logical emphasis, pauses, which conveys an assessment, mood, causes the necessary perception; is the basis of mastery of the word, means the art of using the expressive means of language, its inexhaustible resources and is an integral part of speech culture. The expressiveness of the culture of professional communication of future specialists is ensured by the expressiveness and clarity of pronunciation and diction. Technical factors of expressiveness in professional communication of future specialists – breathing, facial expressions, pace, intonation, gesture.

Logic is a feature of every functional style, a universal concept that strictly adheres to the logic of presentation, which allows tracing the process of searching for the truth, the course of the speaker's cognitive activity. Compliance with this sign of professional communication of future specialists means intelligent, consistent, logically correct speech, which is based on knowledge of objective real reality and complies with the laws of logic. Good knowledge of the language and correct, constructive thoughts generate logically correct professional communication with future specialists.

The appropriateness of professional communication of future specialists takes into account communicative tasks, the speech situation, the composition of the listeners, their mood, condition, and interests; the selection of language means that corresponds to the expression, content, purpose of the message, and character.

The content of professional communication of future specialists requires a detailed familiarization with the topic, with versatile information, a deep understanding of the main idea, statement, and topic, the ability to select and subordinate the necessary material to the chosen topic, as well as to fully contribute to the disclosure of the topic.

Purity. The culture of professional communication of future specialists will be pure when the language sounds correct, there will be correct grammatical forms, and only literary and normative phrases and words will be used.

Wealth is a large amount of active vocabulary, an indicator of the richness of the culture of professional communication of future specialists, a variety of syntactic constructions, and morphological forms used. A well-educated person uses 6-9 thousand words, and an ordinary person uses about 3 thousand words, although he understands ten times more.

Other signs can be added to the characterized communicative signs, which testify to the impeccable and exemplary professional communication of future specialists, the high level of their culture, the ability to use the gift of words to the fullest: emotionality, variety, non-standard, brevity, sufficiency, clarity, inner truth, sincerity, weight, etc. (Starunova, 2018).

2. Factors of professional communication of future specialists

Any communication includes a communicative message and the emotional-sensual sphere of the individual: anger, joy, enthusiasm, and surprise at once. There must be an attitude towards the interlocutor in the communicative act to which it is addressed. Even in professional and business communications, it is almost impossible to completely exclude the emotional reactions of interlocutors (Solodovnyk et al., 2019).

Factors of professional communication of future specialists that determine the structure of the components of such communication can be:

- external to the subject of interpersonal communication;
- internal, determined by individual and individual characteristics for the individual.

External factors of professional communication of future specialists are related to environmental relations, conditions, and properties that provide them with certain opportunities for professional communication.

Let's single out the environment in which the external factors of professional communication of future specialists are revealed:

- natural (conditions that are natural in which a person is);
- anthropogenic (natural environment that is intentionally or unintentionally, directly or indirectly changed by people);
- social (characterized by various conditions – scientific, cultural, socio-psychological, socio-economic, ethnic, informational, spiritual, etc.).

The internal factors of the professional communication of future specialists are the subjective conditions of interpersonal communication that are manifested in the properties and attributes of the subjects of communication:

- social (a person's social status, social activity, living conditions, professional employment, interests and hobbies, etc.);
- biological (gender, racial affiliation of a person, state of health, body structure, individual features of a morphological nature, properties of the nervous system, etc.);
- psychological (manifestations of the regulatory, cognitive, and communicative

levels of the human psyche) (Kovalenko, 2015).

3. The main performance criteria of the style of professional communication of future specialists

The effectiveness of communication depends on the conditions under which the pedagogical interaction takes place and on its characteristics. In particular, the effectiveness of professional communication significantly depends on the individual and age characteristics of a person, the level of team development, the personal attributes of a person, through which the stylistic features of communication of persons, and their educational influences are perceived and refracted. There is no universal prescribed style of professional communication in all conditions. Let's name the general bipolar dimensions that reflect the fundamental aspects of professional communication of future specialists and determine the productivity of human interaction:

- "dominance, activity – dependence, passivity";
- "formality, closedness – individuality, openness";
- "sympathy, benevolence – antipathy, criticality."

Let's name the main performance criteria of the professional communication style of future specialists:

- 1) the activity of partners' positions, their nature (in unproductive – above the partner: active position of the leading partner; in productive – next to the partner: active position of co-participants in the activities of both partners);
- 2) setting goals, and their nature (in unproductive – only close goals are put forward by the dominant partner without discussing them with the partner; in productive – partners jointly develop distant and close goals);
- 3) the nature of responsibility (in unproductive – the dominant partner assumes all responsibility; in productive – all participants of the interaction are responsible for the results of the activity);
- 4) the nature of the relationship between partners (in unproductive – resentment, aggression, irritation; in productive – trust and benevolence);
- 5) the mechanism of identification, the nature of its functioning – isolation (in the unproductive – alienation and

extreme forms of identification; in the productive style – identification and isolation).

In the educational context of the individual, the most expedient is the style of professional communication, in which the demandingness of the manager, which ensures the structure of the environment, determination is combined with benevolence, acceptance of higher education seekers, personal orientation, personalization of interpersonal contacts of each person. For a successful educational process and a full-fledged personal development of a person, from the point of view of ensuring favorable conditions, the most effective style of professional communication that provides for the equality of the psychological positions of the teacher and students of higher education, corresponds to the dialogic and subject-subject strategy of social interaction, readiness to take the partner's point of view, mutual activity, congruence and openness. Building the educational process on the principles of dialogue, as an equal, psychological, pedagogical cooperation between a teacher and a student of higher education, is a necessary condition for the implementation of a personal approach in the development of creative potential and education of students (Haluziak, 2019).

In the educational process of a higher school, there is interaction between teachers and students, which involves the exchange of information. When future specialists communicate, information is presented to students of higher education through the words of the teacher, and its perception is carried out in the process of explanation, conversation, lecture, story, etc. The effectiveness of higher education students' perception of the necessary material for the future professional activity of each person depends on the brightness, accuracy, color, and emotionality of the teacher's words, gestures, and facial expressions. A very important role in the formation of the culture of professional communication of future specialists is played by competent pedagogical communication in educational situations with students of higher education as a teacher, the tact of the teacher, an effective method of influence, the ability to choose pedagogically appropriate material, a sense of proportion, the ability to quickly find the optimal solution to various problems in the learning process, assess a specific situation (Trehub, 2020).

4. Basic aspects of the rhetoric of professional communication

In addition to vocabulary and grammar, the structure of professional communication is of great importance for a person. It is important to build consistent and logical arguments that support the respective positions of the interlocutors. Using the introduction, conclusion and development of the topic should follow a clear structure of the text or speech. This helps a person to perceive information more easily (Salvatierra, 2022).

The main aspects of the rhetoric of professional communication of future specialists include:

Audience analysis: understanding the expectations, needs, and attitudes of the audience is an important stage in influencing the process of the culture of professional communication of future specialists. A business speaker must clearly tailor his message to the person he is addressing.

Argument building: strong and convincing arguments must be developed by the speaker to support his position or idea. This includes the use of statistics, facts, emotional appeals, and examples.

Structuring the message: organizing one's thoughts in a logical sequence is an important next aspect of the culture of professional communication of future specialists when a business message includes the main part with arguments, an introduction, and a conclusion.

Use of language: language should be clear, concise and appropriate for the audience. It is important to avoid excessive technicality and complex terms if the audience is not knowledgeable in this direction.

Visual Communication: Visual elements such as graphs, presentations, charts, etc. play an important role in professional communication, not just verbal language.

Communication with the audience: interaction with the audience, attention and the ability to listen, and responding to questions and comments of interlocutors helps to strengthen mutual understanding and maintain an active dialogue.

5. Exercises for the development of professional communication culture skills of future specialists

Business rhetorical professional communication of future specialists is an important skill of the culture of professional communication of future specialists for their effective interpersonal relations and successful careers. To develop skills, it is worth performing various exercises that can help in this (Kuchai et al., 2021).

1. Exercises to prepare for performances:

- apply exercises to develop future professionals' public speaking skills, including contact with the audience, gestures, and expressiveness;
- create a structure (introduction, main part, conclusion) of the speech and prepare topics for the speech.

1. Voice control and pronunciation exercises:

- learn to correctly emphasize phrases and highlight words to increase the effectiveness of the text;
- to practice exercises for the expansion of voice volume and vocal range for the culture of professional communication of future specialists;
- use dictionaries with correct pronunciation, and learn to pronounce phrases and words correctly.

2. Exercises for active listening:

- learn to listen carefully to others and respond to their ideas and thoughts;
- to better understand the interlocutor, practice questioning exercises.

3. Exercises on persuasion and argumentation

- practice persuasion exercises through evidence and arguments of other people from their point of view;
- practice analysis of counterarguments and arguments on various topics.

4. Improvisation exercises:

- improve response skills and perform improvisational roles in unexpected situations;
- practice improvisational responses to various situations or questions.

5. Exercises to improve non-verbal communication:
 - learn to understand and read the tone of voice, gestures, and facial expressions of other people;
 - practice your own gestures and facial expressions to emphasize the meaning of words.
6. Exercises to increase vocabulary:
 - learn expressions and new words;
 - to make speech richer and more diverse, it is worth using words from different fields of knowledge.
7. Stress management exercises:
 - before important conversations or speeches, study relaxation techniques;
 - before speeches or important conversations, learn stress reduction techniques.

These exercises can help to become a more effective communicator in various spheres of life and profession, to develop business rhetorical communication. To achieve noticeable results, it is important to practice them regularly (Muntian, 2023).

6. Virtual professional communication of future female and male specialists with the active introduction of distance technologies to the system of modern education

The problem of replacing live communication with virtual communication, especially among students of higher education, deserves special attention in our research. The availability of the Internet, innovative devices (gadgets), and information technologies allow almost unlimited communication with anyone at any time. A large number of potential interlocutors creates an idea of a wide circle of friends, acquaintances, colleagues, and subordinates of different social statuses, ages, professions, and genders. A person feels that virtual communication replaces the real one and that he is part of the community. In connection with the active introduction of distance technologies into the system of modern education, the problems of virtual communication, as well as the transition of various types of directions and communications to the virtual world, are gaining special relevance (González-Afonso et al., 2023).

Virtual communication has many common features with real one, but there are also many

differences: first of all, this communication is mediated by an innovative device or computer when the interaction takes place in virtual reality. Then a person, without the presence of a communication partner, has the opportunity to communicate and carry out communication with what the interlocutor imagines and presents, and not with a real person, that is, the personalities they pretend to interact with, and not real personalities (García Arias et al., 2021).

It has been studied that in virtual communication, communication between men and women has enough differences (Solodovnyk et al., 2019). This is due to such factors as gender stereotypes, sociocultural models, psychophysiological features, and social roles.

Female communication in the virtual world is characterized by imagery, empathy, emotionality, and saturation with epithets. Men's messages are more informative and specific and can demonstrate certain emotional states (aggressiveness, etc.). Significant differences are confirmed by the study of gender psychology in the characteristics of female and male communications (Bernal-Turnes et al., 2023). In communication, women are aimed at establishing mutual understanding, receiving feedback from the interlocutor, and paying more attention to facial expressions and appearance, while solving specific cases inherent in male communication. There are social views on female and male behavior, traditional gender roles, and which types of activities are more suitable for women and which for men ("feminine" and "masculine" professions), which result in peculiarities in communication (Cañizares Galarza et al., 2021).

Communication with people who have a status higher than their own or with people in their circle is characteristic of men. Women are more attracted to intimacy in communication, and the ability to trust both interlocutors of their sex and those of the opposite sex. There are also linguistic and stylistic differences in the communication between women and men. L. Korneva believes that "these differences concern, first of all, communicative behavior in general and are manifested in typical strategies and tactics of conducting a conversation, the choice of communication topics and ways of achieving success in it, the degree of confidence, politeness, and cooperativeness of speech, etc. Secondly, differences are observed at all levels of language: phonological, lexical, and grammatical (Kornieva, 2013).

Different styles of communication are caused not only by differences in the psyche and physiology of women and men but also by gender stereotypes that have developed in modern society: the manner of presenting messages, communicative behavior, aggressiveness, persistence, compassion, emotionality, or restraint. Such human behavior in professional communication is determined by various social factors, not only gender differences. These are status relations, professional and sociocultural environment, peculiarities of upbringing, family relationships, etc. (Solodovnyk et al., 2019).

7. Experimental study

For the qualitative organization of experimental research – ascertaining and formative stages – on the formation of the culture of professional communication of future specialists, based on the level gradation, a diagnostic toolkit was selected, and a scale covering high, medium, sufficient, and low levels were distinguished.

In the first stage of the formation of the culture of professional communication of future specialists, the experimental groups did not differ in any way from the control group.

In the second stage, the formation of the culture of professional communication of future specialists took place in accordance (partially) with the author's conceptual idea.

The number of respondents in each sample was almost the same – 98 in EG and 92 in CG. A total of 190 respondents took part in the study.

To check the effectiveness of the formation of the culture of professional communication of future specialists, the formative stage of the study was organized. No additional actions were taken by the CG.

The author's system of formation of the culture of rhetorical and virtual communication of future specialists was implemented in EG, which was based on the purposeful implementation of:

- the main aspects of the manifestation of the culture of professional communication of future specialists;
- basic qualitative communicative features (accuracy, correctness, expressiveness, logic, appropriateness, meaningfulness, purity of speech, richness of language, emotionality, variety, non-standard, brevity, sufficiency, clarity, inner truth, sincerity, weight, etc.)

- factors of professional communication of future specialists;
- the main productivity criteria of the style of professional communication of future specialists;
- general bipolar dimensions that reflect the fundamental aspects of professional communication of future specialists and determine the productivity of human interaction;
- main aspects of the rhetoric of professional communication;
- virtual professional communication of future female and male specialists with the active introduction of distance technologies to the system of modern education;
- development and practical application of exercises for the development of professional communication culture skills of future specialists.

The implementation of the developed educational and methodological support for educational and independent work, the organization of pedagogical and classroom practice based on innovative methods and technologies, and methods and means of organizing the formation of a culture of professional communication of future specialists were taken into account.

At the end of the experimental study of the formation of the culture of professional communication of future specialists, only minor positive changes in CG and positive significant dynamics in EG were obtained. Thus, the vast majority of EG respondents had a high (14.34%), average (48.93%), and sufficient (34.49%) level of formation of the culture of professional communication of future specialists.

Qualitative changes as a result of the study were established based on the comparison of variances for determining the F-criterion. The reliability of the obtained results was proven using the methods of mathematical statistics.

During the calculations, it was established that the numerical value of the F-criterion in the CG, which proves statistical reliability, does not fall within the established limit (from 1.3 to 1.7) (1.0383 – procedural-activity indicator; 1.0393 – motivational-axiological indicator; 1.0234 – reflective-creative indicator; 1.0708 – outlook-cognitive indicator).

The results obtained in CG are not mathematically significant and confirm the fact

that future specialists in the specified area cannot independently achieve significant results.

The indicators of the formation of the components confirm that the indicators of EG and CG at the end and the beginning of the experiment were different: procedural-activity (EG – 19.97 ± 0.33 , CG – 19.53 ± 0.37); motivational-axiological (EG – 16.40 ± 0.38 , CG – 14.25 ± 0.48); reflective-creative (EG – 12.20 ± 0.17 , CG – 13.3 ± 0.22); outlook-cognitive (EG – 11.03 ± 0.22 , CG – 7.78 ± 0.23).

In EG, the results were also radically opposite: the F-criterion is within the limits of the table value (1.3629 – procedural-activity; 1.3033 – motivational-axiological; 1.4003 – reflective-creative; 1.3125 – outlook-cognitive).

The implementation of the author's system of formation of the culture of rhetorical and virtual communication of future specialists made it possible to enrich the professional experience of future specialists for professional activities.

Negative stereotypes of future EG specialists in the professional context were destroyed, and the horizons of professional activity were significantly expanded. In particular, this concerned the main aspects of the manifestation of the culture of professional communication of future specialists; basic qualitative communicative features (accuracy, correctness, expressiveness, logic, appropriateness, meaningfulness, purity of speech, richness of language, emotionality, variety, non-standardity, brevity, sufficiency, clarity, inner truth, sincerity, weightiness, etc.); factors of professional communication of future specialists; the main performance criteria of the style of professional communication of future specialists; general bipolar dimensions that reflect the fundamental aspects of professional communication of future specialists and determine the productivity of human interaction; the main aspects of the rhetoric of professional communication; virtual professional communication of future female and male specialists with the active introduction of distance technologies to the system of modern education.

For personal improvement, future specialists received help in realizing their belonging to a specific ethnic group, expanded intercultural competence, and the culture of professional communication, and increased the level of reflection, sociability, and empathy. As the analysis of the results of the experiment showed, at the end of the study there were positive

significant changes in the levels of readiness to form a culture of professional communication among EG respondents compared to CG respondents.

The study confirmed the practicality of introducing the developed author's system of formation of the culture of rhetorical and virtual communication of future specialists into professional training. The analysis of the results of the experiment suggests that the task of implementing and researching the system of formation of the culture of rhetorical and virtual communication of future specialists has been fulfilled, and the goal has been achieved.

Conclusions

The main characteristics of the culture of professional communication of future specialists were clarified and the effectiveness of the implementation of the author's system of formation of the culture of rhetorical and virtual communication of future specialists was verified to enrich the professional experience of future specialists for professional activities.

The content of research concepts is disclosed and the main aspects of the manifestation of the culture of professional communication of future specialists and its main qualitative communicative characteristics are highlighted. The main qualitative communicative features of the culture of professional communication of future specialists are accuracy, correctness, expressiveness, logic, appropriateness, meaningfulness, purity of speech, and richness of language. Other signs can be added to the characterized communicative signs, which testify to the impeccable and exemplary professional communication of future specialists, the high level of their culture, the ability to use the gift of words to the fullest: emotionality, variety, non-standard, brevity, sufficiency, clarity, inner truth, sincerity, weight, etc.

The most effective factors of professional communication of future specialists are singled out and criteria of productivity of professional communication style of future specialists are proposed.

The main aspects of the rhetoric of professional communication are emphasized. The importance of virtual professional communication of future female and male specialists with the active introduction of

distance technologies to the system of modern education is shown.

Exercises for the development of professional communication culture skills of future specialists are offered.

The author's system of formation of the culture of rhetorical and virtual communication of future specialists has been developed. The study confirmed the practicality of introducing the developed author's system of formation of the culture of rhetorical and virtual communication of future specialists into professional training. The analysis of the results of the experiment suggests that the task of implementing and researching the system of formation of the culture of rhetorical and virtual communication of future specialists has been fulfilled, and the goal has been achieved. Further research will be aimed at highlighting the main aspects of the manifestation of the culture of professional communication of future specialists.

Bibliographic references

- Bernal-Turnes, P., Ernst, R., & Ordeix, E. (2023). The Role of Virtual Communication in Building an Intertwined Relation Between Business Resilience and Community Resilience during the COVID-19 Pandemic. *American Behavioral Scientist*. <https://doi.org/10.1177/00027642231164043>
- Biočina, Z., & Rajh, I. (2021). Rhetorical analysis in business communication classes: gender-based differences in students' perception of the speaker. *The journal of teaching English for specific and academic purposes*, 9(4), 693-702. <https://doi.org/10.22190/JTESAP2104693B>
- Cañizares, Galarza, F. P., Quevedo, Arnaiz, N. V., & García, Arias, N. (2021). Apreciaciones sobre comunicación, trabajo en grupos, y relación afectiva del estudiante durante las clases virtuales. *Revista Conrado*, 17(S1), 382-389. <https://conrado.ucf.edu.cu/index.php/conrado/article/view/1794>
- Fahnestock, J. (2020). Rhetorical Citizenship and the Science of Science Communication. *Argumentation*, 34(3), 371-387. <https://doi.org/10.1007/s10503-019-09499-7>
- García Arias, N., Quevedo Arnaiz, N. V., & Llor Coveña, E. R. (2021). La comunicación oral en inglés en los entornos virtuales de aprendizaje en la Uniandes, Santo Domingo. *Revista Conrado*, 17(S1), 176-184. <https://conrado.ucf.edu.cu/index.php/conrado/article/view/1764>
- González-Afonso, M., Estévez-Moreira, M.d.C., Delgado-Castro, A., & Pérez-Jorge, D. (2023). Is Virtual Communication Possible in Intergenerational Programs? The SIMUL Project. *Social Sciences*, 12, 199. <https://doi.org/10.3390/socsci12040199>
- Haluziak, V. (2019). The use of educational dialogue in the modern teachers training. Scientific notes of Mykhailo Kotsyubynskyi VDPU. *Series: pedagogy and psychology*, 58, 55-63. <http://doi.org/10.31652/2415-7872-2019-58-38-41>
- Kornieva, L. (2013). Gender aspect of communication. *Philological sciences*, 13, 106-113. <https://acortar.link/86OZuD>
- Kovalenko, O. (2015). Model of interpersonal communication of the elderly. *Collection of scientific works "Problems of modern psychology"*, 28. <https://journals.uran.ua/index.php/2227-6246/article/view/158457>
- Kuchai, O., Kuchai, T., & Bida, O. (2021). Praxeological approach in the process of professional training of future specialists of higher education in Ukraine. *Modern information technologies and innovative methods of training in the training of specialists: methodology, theory, experience, problems*, 61, 85-91. <https://vspu.net/sit/index.php/sit/article/view/3024/2497>
- Kuchai, O., Kuchai, T., & Kunikowski, S. (2018). Theoretical principles of communicative training of specialists in the field of civil defense. Scientific papers. *Series: Pedagogical sciences*, 167, 31-33. <https://acortar.link/yMv22u>
- Marrero-Sánchez, O., & Vergara-Romero, A. (2023). Digital competence of the university student. A systematic and bibliographic update. *Amazonia Investiga*, 12(67), 9-18. <https://doi.org/10.34069/AI/2023.67.07.1>
- Molek-Kozakowska, K. (2020). Graphic emotion: a critical rhetorical analysis of online children-related charity communication in Poland. *Critical Discourse Studies*, 17(1), 72-90. <https://doi.org/10.1080/17405904.2019.1567362>
- Mukan, N., Sulym, V., Kuchai, T., Kuchai, O., & Rokosovyk, N. (2020). Communicative activity of primary school pupils in studying a foreign language. *Pedagogical sciences: theory, history, innovative technologies*, 10(104), 374-379. <https://acortar.link/mW1Z1K>

- Muntian, O. O. (2023). Rhetoric of business communication. *Current issues of humanitarian sciences: an interuniversity collection of scientific works of young scientists of the Ivan Franko Drogobitsk State Pedagogical University*, 66(2), 151-154. <https://doi.org/10.24919/2308-4863/66-2-22>
- Salvatierra, L. E. (2022). Reseña del libro *Miradas en articulación: Trayectorias y territorios en comunicación/educación*. *Question/Cuestión*, 3(71), E694. <https://doi.org/10.24215/16696581e694>
- Schneller, A. (2021). Authenticity and credibility in science communication design: a rhetorical approach. *Design issues*, 37 (4), 59-71. https://doi.org/10.1162/desi_a_00658
- Solodovnyk, T. O., Bohdan, Zh. B., & Sereda, N. V. (2019). Gender differences in the personal characteristics of virtual communication of youth of student age. *Theory and practice of managing social systems: philosophy, psychology, pedagogy, sociology*, 3, 110-121. <https://acortar.link/6UJ6cH>
- Starunova, A. L. (2018). Culture of the Ukrainian specialized language. Types and genres of professional communication. *Literature and Culture of Polissia (Series "Philological Sciences")*, 93, 118-124. <https://doi.org/10.31654/2520-6966-2018-11f-93-118-124>
- Trehub, S. Ye. (2020). *Domestic and foreign experience of formation of professional communication culture of future doctors in medical universities*. In Humanitarian dimensions of modern medical education: interdisciplinary dialogue. ZDMU. (pp. 36-41). <http://dspace.zsmu.edu.ua/handle/123456789/13479>