Formation of a Professional Communication Culture Among the Students Using Information Technologies

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Summary

Analyzing the psychological and pedagogical literature, we found the researchers' interest in the problem posed. The concept of "culture of professional communication» is considered, which is interpreted as the level of realization of creative abilities, exchange of messages, organization of mutual understanding, mutual knowledge in the process of professionally directed interaction between subjects, in which interpersonal relationships arise, manifest and form. The concept of "professional culture of communication of a teacher" is interpreted. The motives that are socially significant in the professional communication of the teacher are highlighted. The necessity of forming a culture of professional communication among students, in particular by means of information technologies in the present, is clarified. The interactive component of professional communication is considered. The types of interactions between people in everyday life (ritual and entertainment interaction, joint purposeful activity, no interaction, game and interpersonal interaction) are identified. Traditional and specific forms and methods of teaching are written out. All interactive technologies carried out by means of information technologies are conventionally divided into four groups, depending on the form of educational activity appropriate for their use (pair (work of the subject with the teacher or peers one on one by means of Information Technologies); frontal (the teacher simultaneously teaches a group of subjects by means of Information Technologies); group or cooperative (all subjects teach each other by means of Information Technologies); individual (independent work of the subject using Information Technologies)). In the higher education institution, future specialists should learn knowledge, acquire skills on the basic rules of the culture of professional communication and methods of interaction and their effective use, which is possible with the use of Information Technologies. Recommendations for optimal professional communication have been developed that help you express your thoughts easily and beautifully, and conduct a dialogue in a relaxed and harmonious way.

Keywords:
information technologies, students, culture of professional communication, interactive technologies, interactive component of professional communication, training of a future specialist, professionalism.

1. Introduction

Changes in the 21st century, primarily related to the global restructuring of the economic, political and socio-cultural spheres, are caused by the need to use information technologies, and therefore require setting fundamentally new goals in all spheres of public life. The more a teacher can provide an individual approach to students in the creative process of training, using information technologies, and develop their natural inclinations in a versatile way, the more professionalism they will show in their future life, and they will be professionals with a capital letter.

One of the strategic directions of the state-building process in Ukraine at the present stage is the reform of the higher education system. The main tasks for its development and radical renewal are defined by the Law of Ukraine "On Education", Decree of President of Ukraine "On the Main Directions of Reforming Higher Education in Ukraine", the National Program "Education" (Ukraine of the XXI century), and other documents.

The development of the education system, its radical reform, and the use of information technologies should become the basis for the reproduction of the intellectual and spiritual potential of the people, the release of domestic science, technology, and culture to the world level, national revival, and the formation of statehood and democratization of society in Ukraine. The National Doctrine of Education Development (Ukraine in the XXI Century) defines the main goal of higher education institutions, which is to create conditions for professional training [16].

Purpose of the article. The aim is to determine the peculiarities of students' formation of a culture of professional communication using interaction by means of Information Technologies.

2. Analysis of recent research and publications

In recent years, many special studies have been devoted to the problem of determining the essence of the culture of professional communication as a philosophical category, revealing the general foundations of the development of professional culture, and the communicative aspect of professional culture by means of Information Technologies.

The works of O. Berestenko are devoted to the definition of the essence of the culture of professional communication as a philosophical category [1].

In the works of A. Kuchai [9], the features of training future specialists by means of multimedia technologies are revealed. Scientists R. Veselovsky, S. Zinchenko, Y. Sukach, consider the communicative aspect of professional culture. [4].

Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., Kuchai O. findings that the practice of multimedia technologies in the educational process of higher education institutions lets to move from a passive to an active way of realizing educational activities, in which the student becomes the main participant in the learning process. [7].

Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., Kuchai, O. discoveries the educational objects of multimedia learning technologies: intensification of all levels of the educational process, improving its efficiency and quality; application of the social order caused by the informatization of modern society (training of specialists in the field of informatics and computer technology; training of the user of multimedia technologies); creation of an open education system that optimizes the dynamics of the trajectory of self-education; regular integration of subject areas of knowledge; progress of creative potential of the student, his ability to communicative actions; construction of skills in organizing and conducting experimental research activities; culture of educational work; change and formation of information culture of students [21].

Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. study the fragment of multimedia education in the progress of the information culture. The information range is skilled both as a separate sector of the economy and as a factor in the innovation of education [11].

3. Research methods

Theoretical – analysis of psychological, pedagogical, methodological literature on the topic raised, synthesis, comparison and the apposition, induction and deduction, analogy, which allowed us to characterize the state of working out the problem in scientific literature and draw our own conclusions.

4. Results and discussion

Culture of professional communication – the level of realization of creative abilities, exchange of messages, organization of mutual understanding, mutual knowledge in the process of professionally directed interaction between subjects, in which interpersonal relationships arise, manifest and form [1].

In the process of professional communication, professional relationships are formed, which are divided into types: official and unofficial, business and interpersonal.

Official relations are sanctioned, documented and controlled by the company or its representatives. Informal relations are maintained by the organization and are not documented. Business – related to professional activity and defining it. Interpersonal relationships are selective relationships based on mutual likes (or dislikes), interests, friendships, and feelings.

Business relationships include partnership, cooperation, competition, and coordination. Partnership – relationships of people who interact at the level of cooperation, perform joint work, each performs responsible, independent functions. Cooperation is a joint activity that is characterized by interdependence, solving one common problem. Competition is a contest with each other to achieve victory over others, with the goal of superiority. Coordination determines the coordination of activities, the division of work into tasks and responsibility for its solution.

For the full development of the individual, it is necessary to have a team and collective relations, cooperation, co-creation.

The effectiveness of professional communication depends on interpersonal relations in the team, its socio-psychological climate, which has recently been supplemented by Information Technology. Under favorable

conditions, the team maintains an atmosphere of mutual understanding, cooperation, mutual assistance, and self-realization of the individual.

Scientific research has identified three most common models for the development of relationships between an individual and a team:

A) the individual obeys the collective (conformism);

B) the individual and the team are in optimal relations (harmony);

C) the individual subordinates the collective (nonconformist).

The method of creating a team is based on joint activities, special methods of stimulating activity, and group cohesion. These include the following:

A) skillful statement of requirements;

B) a positively acting asset through counseling, psychological support, exchange of experience, organization and control;

C) organization of life prospects (system of perspective lines according to A. Makarenko) - organization of tomorrow's joy: setting close, medium and long-term goals that stimulate the movement and development of the team,

D) the principle of parallel operation;

E) creating traditions;

F) an optimistic major tone, a sense of confidence and security of each team member;

G) the principle of responsible dependence in the team. These relations mainly have the character of business cooperation, which has recently been supplemented by information technology tools [1].

Professional culture of communication of a teacher by means of Information Technologies is a socially significant indicator of his abilities, the ability to carry out his relationships with students, other people, the capacity and ability to perceive, understand, assimilate the content of thoughts, feelings, attempts in the process of solving specific tasks provided for by pedagogical technology in training specialists using information technologies.

Open educational resources are used for active communication of a large number of students.

According to UNESCO, "open educational resources are educational and scientific resources that exist in the public domain or are issued under a license that allows their free use and modification by third parties" [22]. Now the term "mass open online courses" or MVOC (in English MOOC – massive (mass, large) open (free) online course, which is understood as an open platform that, with the assistance of a recognized specialist in a particular field, integrates not only freely available internet resources, but also social networks, and also offers a platform for active communication of a large number of students who self-organize their participation in accordance with their own learning goals and previous knowledge and skills [14]. Such a course can be positioned as organized according to a specific program, where certain terms of study and topics

are defined, but at the same time active communication during the course can lead its organizers beyond the chosen problem. Such courses are not accredited and are not designed to guarantee certain learning outcomes, unlike open educational resources, which, in particular, provide for the acquisition of a certain set of knowledge/skills with their testing inside and/or at the end of the course in the form of testing or performing certain tasks.

The results of a quantitative analysis of open educational resources in the field of information technologies give grounds to formulate the following proposals for improving the professional training of IT specialists.

The organization of independent work within the framework of individual courses of the curriculum for training specialists can be associated with passing a non-commercial course on one of the platforms. At the same time, you should take into account the amount of independent work (the volume of the course selected on the open platform should be approximately the same or less). Obtaining a certificate of completion of the course on an open platform will be a condition for crediting the completed independent work. The disadvantage of the offer is the limited number of Ukrainian-language courses and the constant updating of the list of available courses on open platforms (every six months).

We also consider it appropriate to use open non-profit educational resources for organizing distance or part-time learning within the variable part of the specialist-training curriculum. The disadvantage of this offer will be the constant variability of the content of the open platform (the appearance of new courses, modernization of "old" courses, and migration of courses over time).

The level of professionalism of the teacher directly affects the level of training of the future specialist, and therefore successful completion of courses on open platforms should be perceived as advanced training for teachers. A certificate of completion of a course of 3 or more ECT credits for long-term professional development and up to 2 ECT credits for short-term professional development [12], can be counted by the administration of the institution as confirmation of professional development for research and teaching staff of the educational institution. The disadvantage of this offer is the possibility of "imposing" certain courses by the administration of the institution, which do not always meet the needs of the teacher himself, are paid, etc.

Our analysis may encourage teachers to conduct their own research on specific open educational resources, depending on their preferences and educational or scientific tasks. We believe that this will have a positive impact on the quality of teaching author's courses, the spread of author's methods and the professionalism of the teacher, and the formation of a culture of professional communication among students by means of Information Technologies.

We also note the possibility and expediency of spreading author's methods when developing our own courses and promoting them on open platforms [19].

The current level of development of information and communication technologies indicates the feasibility of creating a global distance learning system, which, thanks to new information technologies, makes it possible to communicate directly between the teacher and the student, regardless of what physical distance they are from each other [20].

The professional culture of communication of the teacher does not arise out of nothing, it is formed on the basis of certain conditions for the implementation of pedagogical technology in an educational institution, and therefore it seems to absorb its features, is based on it, acts as an important component, a means of activity of the teacher.

The teacher's communication culture is always an indicator of how, with the help of the most important specific pedagogical tasks, methods of communication of the teacher, it is possible to implement the general socially significant principles of educational and cognitive activity of students. The wider the range of communication tools and techniques that a teacher uses, the higher the level of their culture. Therefore, it is worth using information technology tools when forming a culture of professional communication among students.

Speaking about the professional culture of communication of a teacher, we, first of all, should see in all his relationships the ability to achieve the goal set in the professional training of a future specialist.

Pedagogical communication is a type of spiritual production, and it necessarily includes both the transfer (retransmission) of knowledge, skills and abilities based on their creative, productive presentation, and the creation of new ones – the formation of positive universal traits of a personal specialist. If the teacher is not able to establish their relationships with students, then it is hardly worth talking about the presence of communication.

This circumstance is crucial for professional communication, the teacher, and it is the ability to promote the development of the student's personality (to form the necessary amount of knowledge, consolidate important social values, and instill useful skills for work, theoretical, creative thinking). An important indicator of the teacher's professionalism is also his ability to express his attitude to each student, the ability to correctly assess his actions, the ability to respond adequately to behavior, and choose a system of influences that best correspond to the individual characteristics of the student.

Communication is always based on certain motives: needs, interests, social duty, habits, and goals. They can be either individually or socially significant.

In professional communication of the teacher, the motives are always socially significant. What is specific to professional communication is the desire, intentions, and directions that provide for his professional duty. Another important aspect of the teacher's professional culture is the use of diverse and dynamic interpersonal connections to create conditions for the development of the student's abilities in the team. Moreover, here the teacher's personal ability to build their relationships with the team as a single whole prevails, to search for and find the main points for harmonizing individual and collective interests.

The teacher who considers communication as a mutual process in which all students become full partners achieves a high level of professionalism in the culture of relationships.

Professionalism, skills, even talent of a specialist consist in preventing and mitigating difficulties in communication due to differences in the level of training, different abilities, characters; help students feel confident in themselves through communication. The teacher's communication culture as a system of his socially integral orientations has some unstable features associated with the general characteristics of the teacher's profession.

Forms of communication that reflect the level of professional culture of the teacher and are determined by his age, psychological characteristics, and experience of teaching at the University are quite mobile and dynamic. They require a constant creative approach of the teacher to the choice of communication methods [2].

Analyzing the positives, we note that during training, students develop the ability to perceive information from the screen, transcode the visual image into a verbal system, evaluate the quality and apply selectivity in information consumption, and so on. With the development of the Internet, a new type of multimedia tools focused on Web Technologies has appeared, which can be used to communicate in the process of classroom and independent work of students.

Despite the fact, that computer and other technologies are becoming an increasingly recognized part of human activity in the workplace and at home, education has been late in integrating information technology into the educational process. Students of higher educational institutions should use computer tools as an organic component of their future life. In recent years, much attention has been paid to multimedia technologies that have penetrated the field of education and their application has significantly affected the instructional methodology of information and knowledge of students. Now the intervention of multimedia technologies in the learning process is a real thing. The use of multimedia is a powerful educational potential for optimizing the process of learning, communication, and practical work.

Multimedia software tools contribute to improving the effectiveness of open educational activities, such as:
- viewing audiovisual information;
- theory training using practical exercises;

- pedagogical control and measurement of learning performance;
- working with dictionaries of concepts and terms;
- interactive communication and discussion of the material with the teacher.

The teacher presents students with theoretical material, using text and graphic screens, cartoon inserts, video clips, demonstration and illustration programs. Students can scroll through pages with information forward or backward, view the material from the beginning or from the end, and find the desired section by content [9].

Scientists claim that multimedia learning is a didactic strategy, which is characterized by the use of adequately selected didactic resources in the learning process. Students have the opportunity to acquire knowledge from various sources of information, to form the skills necessary for further functioning in the modern world. The multimedia training format makes it possible to acquire communication skills in various circumstances, process information, interact with other people in the process of working together and solving current problems [13].

A. Petrenko refers to the special features of multimedia:
- integration of multi – valued types of information in one software product-both traditional (text, tables, illustrations, etc.) and original (speech, music, videos, animations, etc.); integration takes place using a computer and various information playback devices (microphone, audio system, CD-ROM player, TV, electronic musical instruments);
- work in real time, because unlike text and graphics, which are static in nature, audio and video signals appear only in real time;
- a new level of interactive communication "human – computer", when in the process of dialogue the user receives extensive and diverse information that contributes to improving the conditions of study, work or recreation [15].

Professional training of a modern specialist in the field of primary education necessarily implies readiness to constantly improve their professional skills in the context of the development of the information society and informatization of the educational process [3].

Theoretical analysis of psychological and pedagogical literature allowed us to identify five criteria of professional competence of a future specialist: general cultural, general professional, communicative, personal, self-development and self-education.

1. General cultural criterion. A specialist in the field of educational activity needs a good general education; he must have extensive and deep knowledge in various fields. There are such indicators of professional competence of a specialist according to the general cultural criterion:
- general outlook;
- awareness of cultural innovations;
- speech culture [6].

2. General professional criterion. Successful learning is possible only if the teacher fully and deeply owns the content of academic subjects at the level of modern science, as well as if this content is selected by the teacher in strict accordance with the goal set with the ability to communicate professionally and express their opinions. Indicators of a teacher's pedagogical competence can be considered:
- knowledge of the content of academic disciplines;
- knowledge of modern theories and technologies of teaching and upbringing;
- application of Information Technologies;
- knowledge and real accounting of factors that ensure the success of pedagogical activity [17].

3. Communication criterion. The teaching profession belongs to a group of professions in the "person-to-person" system. Therefore, the central component of pedagogical activity is specially organized communication. Interest in the world of science, using information technologies, the need for communication is a prerequisite for professional self-determination of a specialist. This need is often manifested in the desire to be a mentor for students, to pass on the necessary intellectual and moral experience to them, in the desire to take care of and care for them [18].

4. Personal criterion. The quality of professional teaching activity, as in any other activity, is largely determined by the properties that the specialist performing it has. For successful work, a teacher needs to have a variety of personal properties and qualities, and apply information technologies. You can group the professional qualities of a teacher:
- professional orientation of the individual, special maturity and responsibility, professional ideals, compliance with the chosen profession;
- the presence of specific professional properties: organization, initiative, demanding, fairness, flexibility, intellectual property, creativity;
- the presence of specific psychophysiological properties: stability of the nervous system, high emotional and volitional tone, good performance and endurance to psychoemotional loads [8].

5. Criterion of self-development and self-education. The professional pedagogical potential of a specialist cannot be formed for the last time. Professional improvement in the process of accumulating practical experience should be carried out based on a critical and demanding attitude of the specialist to himself and to his work. Constant personal and professional growth ideally acts as an integral feature of a specialist's professionalism [18].

Consider the interactive component of professional communication. Interaction (Latin inter – between, frequency of action, cancellation and actio – action, permission) is the process of organized verbal and nonverbal interactions that occur during communication. Communication is an active interaction of subjects who act

on each other, evaluate actions, perceive or do not perceive thoughts, assessments, and feelings directed at them. By exchanging information, each of the partners is an active participant in the process of joint activities. If one of the subjects shows passivity, communication does not occur.

American psychoanalyst Eric Byrne (1910-1970) identified the following types of interactions between people in everyday life:

- ritual interaction, which does not have a meaningful load, is usually limited to the usual phrases: "Hello!", "How are you?", "Come on!", "Bye!" and so on;

- entertaining interaction – involves a pleasant and at the same time informative pastime, such as conversations on everyday topics: "How long have you not seen each other?", "What and how much?", "But earlier..." and so on;

- joint purposeful activity – activity, work aimed at achieving certain goals: "Today we are completing the report. You need to work a little more, and then everyone will be given an extra day of rest"; "You need to go on a business trip urgently tomorrow" and so on;

- lack of interaction – occurs in a situation in which partners are forced to talk about something, exchange actions, but are not psychologically attuned to each other. There is a short contact between the interlocutors, without prior preparation and the need for repetition or continuation;

- game interaction – takes place according to strict rules, with a certain meaning: it is used to achieve the goal, successfully entering the role, to feel pleasure (benefit).

There are several classifications of types of interpersonal interaction. According to the achievement of the goal, there are two main types of interpersonal interaction: partnership, or cooperation (the achievement of the goal by one of the subjects contributes or does not interfere with the implementation of the goals of other subjects), and rivalry, or competition (the achievement of the goal by one of the subjects makes it difficult or even excludes the achievement of goals by other subjects). Sometimes these types of interactions are referred to by other terms: consent and conflict, adaptation and opposition, association and dissociation.

Another classification of interaction is based on the number of subjects. It is this classification that contributes to the construction of the concept of developing a culture of professional communication, personal growth of those who communicate productively, moving from simple types of interaction to more complex ones, to joint activities. This is the interaction between a group, between a person and a group, between individuals (dyad). Depending on the roles, this can be an interaction in which the leader, just a member of the group, influences the group. This can be an interaction in which a certain subgroup of its members (an aggregate subject) affects one of the subjects. A subgroup, together with a leader, can act on one or more members. All members of the group, including the leader, influence each other and each other on himself.

Speech culture develops skills in regulating the selection and use of language tools, in the process of speech communication, and helps to form a conscious attitude to their use in speech practice [1].

In modern pedagogy, the forms and methods of teaching are divided into traditional and non-traditional. The task of teachers of higher educational institutions is to choose such forms and methods of teaching that would allow each student to show activity and creativity. That is, along with traditional forms and methods of teaching, there are specific [9]. These include: informational (conversation, team training, demonstration, consulting, lecture, expertise), operational (algorithm, video confrontation, self-criticism, "do as I do", laboratory exercises), search (analysis of specific situations, business game, business basket, discussion, forum, maze of actions, brainstorming, audience reaction, creative dialogue, design, etc.), independent training. These forms and methods can be applied both for mastering new material and for testing students' knowledge using information technology tools. The choice of forms and methods depends on the purpose, content and objectives of the educational process aimed at preparing students for professional activities. The essence of interactive learning is precisely that the educational process takes place in conditions of constant active interaction of all students. All interactive technologies can be divided into four groups, depending on the appropriate form of educational activity for their use:

1. Pair (work of the subject with the teacher or peers one-on-one).

2. Frontal (the teacher teaches a group of subjects at the same time).

3. Group or cooperative (all subjects teach each other).

4. Individual (independent work of the subject).

Thanks to the processes of interaction, non-standard, unconventional thinking is formed. This is because the educational process is a system of constantly changing pedagogical situations that make it necessary to provide appropriate flexible, intensive, conceptually rich professional thinking of a specialist. The formation of professional thinking is much more difficult than mastering knowledge, since quite often students are not able to make independent decisions, move away from the studied pattern, express independent judgments in certain pedagogical situations, anticipate possible results of interaction with the team, an individual. [4].

In a higher education institution, future specialists should learn knowledge; acquire skills on the basic rules of the culture of professional communication and methods of interaction and their effective use.

The Ten Commandments of optimal professional communication have been developed, which help you express your thoughts easily and beautifully, conduct a dialogue in a relaxed and harmonious way, in which information technology tools play a great role:

- express yourself in the correct language, in accordance with generally accepted language norms;

- take into account areas of communication (colleagues, conferences, TV studios, etc.). It is unacceptable to speak the same style in different areas. Do not be verbose. Specifically formulate your proposals, making their constructiveness and novelty accessible to everyone;

- express yourself in a clear, flowery language;

- be able to listen to your opponent;

- prove and clearly express your thoughts;

- be restrained in your gestures;

- respect the opinion of the opponent, joining the opinion of others, do not repeat yourself, it is advisable to motivate your speech action;

- keep the listener's attention, do not abuse pauses in speech;

- use emotional means of action.

Compliance with these rules removes the manifestation of stiffness in communication, establishes harmonious relationships between people, and creates an attractive image for the interlocutor [1].

Teaching and educating students, each teacher should assert by his example that the language culture of each person, and students in particular, should become their reliable support in expressing the independence of thought, the development of human feelings [5].

Conclusions

Drastic changes in the labor market require a revision of traditional approaches to training specialists in higher education, open up broad prospects for specialists in various fields, but require a high level of personal professionalism.

Culture of professional communication (according to O. G. Berestenko) – the level of realization of creative abilities, exchange of messages, organization of mutual understanding, mutual knowledge in the process of professionally directed interaction between subjects, in which interpersonal relationships arise, manifest and form, is a necessary condition in the training of a highly qualified specialist.

To meet the modern requirements of employers for specialists, a new approach is needed to form a culture of professional communication among students, to the personality of a new formation, to a creative, mobile, competitive, morally mature, professionally and culturally professional, ready for active life in the conditions of modern socio-cultural realities that are formed in the learning process. Therefore, the formation of a culture of professional communication among students, in particular by means of interactive technologies, is extremely necessary in the present.

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