Communicative teaching models: the formation of the professional pedagogical competence among health and safety school teachers

Modelos de enseñanza comunicativa: la formación de competencias pedagógicas profesionales entre los profesores de Escuelas de Salud y Seguridad Social

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ABSTRACT:
The paper describes the pivotal role of communicative models in teaching future health and safety school teachers. There is much evidence that these communicative models are powerful platforms for building professional competences of instructors who teach health and safety courses at school. The paper considers a growing body of literature describing different approaches to classifications of communicative models. Our major concern is the dialogical form of communication which is an essential part of the open models of instructive communication. We offer a wide range of educational practice models for teachers of health and safety; the models stem from a competence-based approach. The models are of much interest because they contain a dynamic scenario of the proposed training interaction accompanied by inverse feedback association. Accordingly, we discuss the conditions for successful communicative models which are important for competence development of health and safety teachers. Central to the entire paper are the levels of

RESUMEN:
El documento describe el papel fundamental de los modelos comunicativos en la enseñanza de futuros maestros de Escuela de Salud y Seguridad Social. Existe mucha evidencia de que estos modelos comunicativos son plataformas poderosas para desarrollar las competencias profesionales de los instructores que imparten cursos de salud y seguridad en la escuela. El documento considera una literatura que describe diferentes enfoques de clasificaciones de modelos comunicativos. Nuestra mayor preocupación es la forma dialógica de comunicación que es una parte esencial de los modelos abiertos de comunicación instructiva. Ofrecemos una amplia gama de modelos de práctica educativa para maestros de salud y seguridad; los modelos se derivan de un enfoque basado en competencias. Los modelos son de mucho interés porque contienen un escenario dinámico de la interacción de entrenamiento propuesta acompañada de una asociación de retroalimentación inversa. Por consiguiente, discutimos las condiciones para los
1. Introduction

The issue of teachers’ training modernization has received considerable critical attention in Russia. A key aspect of the modernization is a competence approach (Kozyreva, V.A. et al., 2005), actualized in teachers’ communication, reflecting global trends of the increasing role of information and communicative interaction in the life of modern society.

Recently there has been a renewed interest in learning process as an interaction between a teacher and students. This idea has actualized attention to intersubject interaction, communication, cooperation, multilateral dialogue. All these forms of partnership are an integral part of FSES (Federal State Education Standards) in teachers’ training education. In this regard, the communicative function is one of the priority functions of modern teachers. N. V. Kuzmina, I. A. Kolesnikov, and V.A. Slastenin have indicated that communicative competence plays a pivotal role in modern education which tries to replace the rigidly regulated relations between the teacher and students. Predominantly monologed forms of communication are outdated while new interactive dialog forms, ideas and models come to the forefront of instruction.

In 2007, I.A. Kolesnikova, formulated the concept of communicative model as a verbal, graphic or other description of the general structure, constituent elements, and functional characteristics of the communicative process, as well as, the genesis of these elements (Kolesnikova, 2007: 16). The author proposed a model of socio-cultural communication based on the multilateral process of messaging in the presence of common interest and general range of concepts, the specificity of which depended on the content of the relationship and the social environment. Qualitative studies by M. Buber and M. M. Bakhtin described dialogues as an active interaction of equitable actors to acquire points and meanings. This idea is of much value for teaching process. Later B.G. Ananiev, I.A. Zimnya, V.P. Zinchenko, S.Yu.Kurilova, M.I. Lisina, A.A. Leontiev, B.F.Lomov, A.V.Mudrik, B.D.Parygin, B.S.Rudensky, G.S.Trofimova assumed that dialogues reflected the values and aspirations of the modern social culture (Kulagina, I.Yu., 2008), (Trofimova, G.S., 2012). Consequently, dialogues make it possible to achieve mutual understanding, positive interaction, and friendly approaches, as well as, mutual tolerance.

The paper offers several theoretical and practical implications. The central thesis and purpose of the study is the theoretical description of teachers’ communication and communicative models of education, essential for professional competence of health and safety school teachers. Therefore, we also discuss the conditions for the communicative models, as well as, their implementation in the educational practice of a teachers’ training university.

2. Methods

Several methods have been used to achieve the purpose of the study. We used the methods of theoretical analysis and the generalization of psychological and instructive representations and experience in teachers’ communication among professionals who taught health and safety courses. This approach is particularly useful because it provided a brilliant opportunity for the use of comparative method and systematic generalization. The advantages of these methods are a holistic view of the subject under the study. Another advantage of this approach is that it allowed us to develop various communicative models of training. These results meet modern requirements for higher teachers’ training education. The model
approach is a well-established theoretical tool which offers several attractive features connected with best educational practices all over the globe.

3. Results and discussion

There is much evidence that communicative-oriented learning falls in line with humanists’ learning orientation. In 2001, E.V. Polat et al. proved that various forms of learning interaction "launched" the internal mechanisms of personal and professional teachers’ development (Polat, E.V., et al., 2001). L.S. Vygotsky (Vygotskii, L.S., 2005), V.V. Davydov, A.N. Leontiev, D.B. El'konin within the framework of psycho-pedagogical science assumed that the development of the learner was a direct result of his functioning as a subject of his own activity (Leont'ev, A.I., 2005). This activity correlates with the interaction of educational process participants. Therefore, our major concern is the nature of educational process participants’ interaction in various models of teachers’ communication, i.e., hierarchical, horizontal, interactive, resonant (Kolesnikova, I.A., 2007). The models are an integral part of professional education of a modern health and safety teacher.

Under the conditions of the hierarchical model, a traditional linearly unidirectional form of communication develops, including the teacher’s transfer of the subject and methodological information to the students. The main tasks here are as follows: the formation of motivation and awareness of the importance of the educational material, the consistency of its presentation, the persuasiveness and evidence of the argumentation, the use of means of enhancing perception. The model is popular in the conditions of academic lectures with the presentation of new complex content, i.e., the doctrine of life safety, its legal and regulatory framework, the organization of protection in emergency situations of natural, technogenic, social, ecological nature, the methodological system of safety training. The model does not involve discussion or conversation. It is advisable to use the hierarchical model when instructing the execution of practical tasks to form skills and methods of activities (first aid to victims, orientation in conditions of self-contained survival in nature, lesson analysis, the creation of portfolio). This model is in demand in the organization of independent work, which contributes not only to the assimilation of the necessary content, but also to the development of creativity among future teachers. For instance, clear recommendations when performing self-directed work to compile a SWOT-analysis to assess the internal and external security factors of an educational institution, ensure the success of creative approach to the task. The dominant form of communication is a monologue which results in the adequacy of perception of information. Other advantages of this approach are an unambiguous attitude to the interpretation of key concepts, the integrity of representations, the formation of a scientific style of thinking, the development of logical methods of cognition.

The horizontal model of free communication implements the ideas of dialogue. The dialogue, based on the principle of information ownership, allows participants to engage in productive discussion. The approach is mostly effective in acquiring new knowledge about the subject and methodological areas of health and safety course. M.M. Bakhtin, V.F. Berkov, V S. Bibler, P. P. Gurevich developed a theoretical framework of the culture of dialogue, according to which dialogue was a way of interaction of consciousnesses, in the process of which understanding arose. Presenting a universal, all-encompassing phenomenon, the dialogue permeates the whole of human life, everything that has meaning and sense in it. Therefore, any statement in this model of instruction communication with future health and safety teachers is not an ordinary proposal, but a semantic unit that stimulates the response. For the dialogical form of communication, the equality of all participants in the discussion of the problem, the freedom of expression of one’s own opinion, the openness of positions plays a pivotal role. The subject-subject interaction of future health and safety teachers has a high creative potential, the realization of which leads to the realization of their social and psychological community, i.e. “we-feeling”.

The teacher at the same time expresses positive attitude and is open to partnership activities at seminars, round tables, conversations, the discussions of the results of teachers’ training practice.
In the framework of the interactive model of instructive communication, considered by us earlier (Kamerilova, G.S., et al., 2017; Kamerilova, G.S. and M.A. Kartavykh 2017), it is important to develop a dynamic scenario of the proposed training interaction in the training of health and safety teacher based on inverse feedback association. The ongoing cyclical interchange among participants differs in the choice of the content, forms, and methods of its development, therefore, the communicative process considers personal preferences. N.G. Alekseev, G.P. Shchedrovitskii have proved that if in the hierarchical model the given information does not undergo any changes, then in the future information develops because of the partnership contribution of participants and their interpretation activities (N.G. Alekseev, G.P. Shchedrovitskii). Intersubject interaction presupposes an indispensable consideration of the specifics of the educational situation and changes in the level of thought activity of students, the conformity of the means of instruction and communication to the process of personal and professional development. During the educational process in real time, the participants adjust individual and collective types and forms of communication, ensuring more free expression and the achievement of the goal.

The resonant model reflects, as a rule, the emotional resonance of the learning interaction, i.e., active excitement, calm reasoning, confident knowledge, or insecure anxiety. Communicative emotions – the desire to share feelings, thoughts, positive or negative attitude – help to better understand each other, make communicative activity more productive. Of much importance is the emergence of feelings of experience, empathy, perception.

4. Discussion

Comparative analysis of activities in different communicative models allows us to identify its essential features, i.e., interaction, involving the subject-subject mode of communication; purposefulness; coordinated activity of subjects; the process of mutual exchange of values, content, norms, and ways of communication; general and personal performance (Kamerilova, G.S. and M.A. Kartavykh, 2016 a,b). The model of the communicative person that is being formed is structurally associated with components characteristic of any type of activity developed by A.N. Leont’ev (Leont’ev, A.I., 2005). It can be viewed through the aspects which are as follows: a) motivational – the need for communication; b) cognitive – cognitive and social experience; c) functional and technological – possession of means of communication. Thus, communicative activity, like any other, has three sides, i.e., motivational, objective and executive. Any communicative situation represents the unity of all three sides, resulting in reflection. It starts with the motive and the goal, the plan of joint activity and ends with the result. Finally, comes the analysis of the results to achieve the goal set out in the beginning. The central link in this process is the dynamic system of specific communicative actions and operations, managed by the teacher.

To identify how each communicative model functions in conditions of partnership activities and evaluate their effectiveness, we organized three groups of communicative models that we considered earlier (Kamerilova, G.S. et al., 2017). To build these models we adopted the approaches of V.Rubtsov (Parfenova, T.A., 2016).

To assess management practices and obtain further in-depth information on communicative models we created the first group based on the principle of individual contributions. This model implements the ideas of cooperation, compulsory mutual assistance, not allowing individual and group competition and rivalry. We strongly believe, that correctly organized communication ensures the development of group solidarity, mutual understanding, coherence in actions aimed at achieving the set goals. It was hypothesized that the developing potential of this group of communicative models stems from the diversity, versatility, and multilevel structure of the educational interaction. The model offers enough space for special aspects of educational environment. The favorable inviting emotional atmosphere of the educational environment is comfortable for free, interesting, and equitable communication.

Freedom, interest, dialogue represent not only the actual values of modern teachers’ training education, but also the real conditions of personal and professional self-
development. These conditions are indispensable for the individual formation of competent teacher of health and security. Free mode offers a trainee a unique opportunity for performing personally significant actions, which stimulates the formation of interest, ground, and state of mind. Consequently, in turn, free mode aims at creative search, performing unlimited activities in the interactive mode of communication.

The current study found that this group of communicative models stems from the technology of training in cooperation (cooperative learning), where students work together in small groups. In our practice we used the options which are as follows: “Student Team Learning” (STL, team training) and cooperative learning – Jigsaw. These activities helped the students study the problem of forming a culture of healthy lifestyle. Of much importance is the fact that this communicative model creates the conditions when group goals prevail over individual ones. The success of the group is more important than an individual achievement. Therefore, the group performs one general task based on the independent activity of each participant. At the same time, participants acquire the realization of personal responsibility for the success of the overall result, they develop the need for constant interaction and mutual assistance, monitoring the progress and results of task. During this activity trainees get an access to a team work experience. Another important finding is the fact that while working on the task, the participants are not only changing the level of their individual educational achievements, but also, to a certain extent, their manners of behavior. There is much evidence that intensive development of educational interaction results in group solidarity and collective responsibility, ignoring their previous individualistic relations. Our major finding is that group work provides higher educational results, since the most prepared students, advising others, not only ensure the professional growth of others, but also actively develop themselves.

It is interesting to note that learning interaction in communicative models, created based on individual contributions and the ideology of cooperation, involves the use of innovative teaching methods and technologies. The prime example of such technologies is the technology of project teaching. As far as prerequisites are concerned, it is important to note that the implementation of educational projects embodies modern trends in the development of higher teachers’ training education, i.e., openness, competence orientation, teaching context, and variability. The project activity in the field of the formation of a healthy lifestyle culture, organized by us in the practice of teaching the teacher training university, contributed to the development of the creative independence of the educators, which resulted in an educational product in the form of computer presentation of both theoretical and significant practical value.

Now we proceed to the discussion of the second group of communicative models. It implies the positional principle, which means the discussion of opposing points of view, the clash of opinions, the development of alternative positions through discussion, debate, adversarial argumentation, line of thinking, as well as speech control. The results of this study show that this group includes two types of models, i.e., conceptual-positional, and role-functional. The study confirms that conceptual-positional model implies the group work of participants, with previously known disagreements on the problem under discussion. In this case, it is advisable to organize discussions to resolve the cognitive conflict. At the same time, the relevance of the discussed problem, its personal and social significance, the lack of clear and unambiguous solution is important. To gain a detailed understanding of the model, we designed the discussion problem as a case and discussed it within the framework of situational analysis. The role-functional model also reflects the representation of the different positions of participants, however, through the performance of their respective model roles. This model is in great request in business and role-playing games. According to recent studies, the right management of this model results high developing potential owning to increased emotionality, creativity, various improvisations, and role models of behavior. Providing deep inner motivation, the game with serious preparation for imitation of behavior patterns of different characters contributes to the successful assimilation of not only the content of education, but also the style of professional behavior. Participants of the role game master the methods of impersonation, special professional terminology, successful reasoning, and skillful speech characteristics.
Our results further confirm the idea that models based on content-activity principle imply the following determinant of the effectiveness of group interaction. This determinant is a successful productive activity of participants, i.e., a project, modeling, the development of an abstract or a theme point, or an innovative cluster. There is much evidence that the selected models imply the use of teaching technologies based on broad between-subject communication.

The comparison of the findings with those of other studies confirm the idea that, proceeding from the competence approach, the implementation of communicative models of educating future health and safety teachers, requires several conditions which are as follows:

- the creation of positive motivation for students, based on their internal needs, previous experience of communication, communicative abilities;
- the enrichment of the communicative base within the content of the basic educational program;
- a massive access to interactive communicative modes, based on information and communication technologies. This approach may be further supported with electronic educational and methodological complexes of the educational information environment of the university utilizing LMS Moodle;
- the creation of an “I-concept” through reflexive tasks on the productive and creative levels;
- the monitoring of specific features of bachelor's training;
- mature communicative skills among university instructors.

The research show that the formation of professional teaching competence relates directly to partnership practice. This practice rests on a level structure (Ya.Yanoushek). First and foremost, at the initial level, the information exchange of opinions dominates. This level develops interactions based predominately on information exchange, its transformation, the levelling of differences in information acquisition among communicators. At the second level, in addition to the informational function, it is important for communicators to perform the functions of mutual learning, instructing, monitoring, ensuring coordination and cooperation of joint activities. Interestingly, but the exchange of relations, knowledge, and the methods of goal achievement are subordinate to the solution of a team task. At the third level, the communicators prioritize the level of mute – “without words” – comprehension of one another. They consider the opinions of each team member, assessing his contribution to the team task.

The most obvious finding to emerge from this study is that the final reflective stage includes the analysis of personal and interpersonal aspects of the activity. When interpersonal reflection occurs, not only self-perception of a communicator is important. Of much importance is also the perception of him from the perspective of other communicators, i.e., “I am in the eyes of others”.

5. Conclusion

This study has shown that the formation of the professional teaching competence among future health and safety teachers relates directly to the implementation of various forms of communicative activities. The evidence from this study suggests that well-grounded communicative models are of much practical value. They manifest themselves as highly effective because they raise the quality of education through interactivity, reflection, modeling, and design.

The current data highlight the importance of dialogue mode. Intersubject interaction in the dialogue mode determines the meaning position of the learner; it directs his activity to search for new ways of expressing his thoughts, defending new teaching values and beliefs.

References


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