Formation of student non-verbal communication culture

La formación de la comunicación no verbal entre los estudiantes

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ABSTRACT:
The relevance of the study is due to the fact that the modern young man's social success is ensured through the formation of communication culture that allows him or her to become a bright individual, fully "a man of culture." The paper purpose is to reveal the culture of non-verbal communication as an integrative category, the necessary component and result of training specialists in the process of professional education, involving the use of cognitive, emotional, creative and activity-based personal resources. The paper presents a scientific concept that characterizes the formation of non-verbal communication culture between students as a pedagogically conditioned transferring of spontaneous use of communication non-verbal means to the level of awareness and conformity to cultural norms and requirements of society; The main prerequisites for the formation of non-verbal communication culture among students are outlined: historical, cultural and anthropological; The set of approaches is grounded: synergistic, value-semantic, personally oriented, social-pedagogical and principles: cognitive mobility, nonverbal-semantic activity, poly-semantic, poly-culture; The complex methodical provision of non-verbal communication culture formation of student's youth is developed.

Keywords: culture of nonverbal communication, student youth, vocational education

RESUMEN:
la relevancia del estudio se debe al hecho de que el éxito social del joven moderno se garantiza a través de la formación de una cultura de comunicación que le permite convertirse en un individuo brillante, un verdadero 'hombre de cultura'. El objetivo del artículo es mostrar la cultura de la comunicación no verbal como categoría integrativa, componente necesario y resultado de la formación de especialistas en el proceso de la educación profesional que implica el uso de recursos personales cognitivos, emocionales, creativos y de actividades. El estudio presenta un concepto científico que caracteriza la formación de la cultura de la comunicación no verbal entre los estudiantes como una translación condicionada pedagógicamente del uso espontáneo de los recursos de comunicación no verbal al nivel de la conciencia y la conformidad con las normas y requisitos culturales de la sociedad. Además, se han identificado los principales prerrequisitos para la formación de la cultura de la comunicación no verbal entre los estudiantes: histórico, cultural y antropológico. Se explica el conjunto de los enfoques sinérgico, evaluativo-semántico, de orientación personal, social-pedagógico, además de los principios de la movilidad cognitiva, de la actividad semántica no verbal, polisemántico, policultural. Se ha desarrollado el apoyo metodológico integral de la formación de la cultura
1. Introduction

Modern trends in the development of society, increased demands to the level of specialists’ professional competence, growing in the context of socio-cultural modernization, determine the increase in the social significance of the general culture, the culture of communication among students, including non-verbal, enrichment of this component of higher professional education content. The students’ culture of non-verbal communication assumes the assimilation of a wide range of non-verbal means and stimuli of the environment; implementation of social rules for demonstrating feelings and intentions; recognition and application of non-verbal standards; active and comprehended use of the society space and its incentives in various situations of communication; optimization of the interaction of subjects and their impact on each other; overcoming problematic situations in the society with the promotion of their original solutions in the detection of problems associated with its non-verbal form; manifestation of resistance to manipulative effects in society, carried out through non-verbal means and stimuli of the environment.

The problem of using non-verbal means of communication was considered in professional pedagogy (Bondarevskaya, 2005; Zhokhov, 2011; Dubina, 2012; Kamyshev, 2012; Zagvyazinsky, 2012). In the educational process of the university, non-verbal communication is presented in terms of the use of communicative abilities and skills, as well as the development of empathic, perceptual, fascinating qualities of the student (Morozov, 2011; Formanovskaya, 2016).

Non-verbal aspects of communication and non-verbal behavior are studied by many foreign (Borg, 2008; Armstrong & Wagner, 2007; Bendler & Lavalle, 2012; Werderber & Werderber, 2013; Vaclavik, Bivin & Jackson, 2005) and domestic researchers (Bodalev, 2015; Batarshev, 2015).

Non-verbal communication as a sociocultural phenomenon is viewed from philosophical, anthropological, cultural, historical, physiological, sociological positions in the works of domestic and foreign scientists (Kulikova, 2009; Panfilova, 2014; Pease, 2010).

In the context of the study, efforts were made to understand the specificity of perception and interpretation of non-verbal information in pedagogical communication (Borozdina, 2005; Boyko, 2016). At the same time, despite the regularly growing interest of researchers in the problem of non-verbal communication and the various facets of communicative culture in pedagogy, special scientific research has not been devoted to the culture of non-verbal communication, and the study of the process of its formation in the theory and methodology of vocational education is particularly relevant. Today, there are no methodological grounds, theoretical principles and patterns underlying the formation of nonverbal communication culture of students that have been poorly reflected in scientific research, are not explained in the process of vocational education.

The analysis of practice and theoretical research on the problem made it possible to identify the contradiction between the increased requirements of the society to the level of the communication culture of the educated young person and the inadequacy of the conceptual justification and resource provision for the formation of students’ nonverbal communication culture in vocational education. The research work of the authors is aimed at its resolution.

2. Materials and Methods

Theoretical and methodological prerequisites for studying the formation of student non-verbal communication culture in vocational education were determined by the following approaches: synergistic, value-semantic and socio-pedagogical.
In the framework of the synergetic approach, the formation of student non-verbal communication culture in vocational education is justified as an integral process of transition of a constituent components’ complex system from a disordered to an ordered state. The study defined the structural composition of non-verbal communication culture on various grounds. The components of non-verbal communication culture in accordance with the structure of personality are (Pilipishin, 2009; Dotsenko, 2014): personally significant one, characterizing the importance of social norms and values of non-verbal communication for a person, attitude to morality and etiquette; resource one (educational, professionally significant), representing knowledge and skills, transferring into skills in the field of non-verbal communication; behavioral one, characterizing the implementation of values, norms and rules of non-verbal behavior, non-verbal communication and non-verbal interaction in situations of non-verbal communication.

The value-semantic approach to the formation of student non-verbal communication culture characterizes their personal motivation for cultural non-verbal interaction in the process of educational and extracurricular activities. In this case, the student has a desire to behave in a social environment culturally, correctly organize the communication space with the use of non-verbal means, an interest in the values of non-verbal communication is formed, there is a conviction that it is necessary to follow social and cultural norms of non-verbal behavior in relationships with other people; in the educational process of the university, the goal is formed to achieve the ideal: a person, a professional, who communicates at a high professional and cultural level.

Socially pedagogical approach reveals the culture of nonverbal communication as a means of student social adaptation and successful socialization not only in the educational environment of the university, but also in an open society, in accordance with social expectations and preferences.

The culture of non-verbal communication among students as part of a common culture in vocational education performs important functions in the study: adaptive, socially-psychological, regulative, personality-developing, informational-cognitive, human-creative. Adaptive function of non-verbal communication culture promotes positive orientation and socialization of student youth both in the university and in the surrounding world, which constantly influence them through various stimuli, in most cases non-verbal ones. The socio-psychological function of non-verbal communication culture is to create with the help of non-verbal means optimal from a psychological point of view conditions for adaptation in the communication environment of students. Regulative and personality-developing functions of non-verbal communication culture contribute to the self-identification of young people, enable self-disclosure in the educational environment and open society, while remaining socially successful and attractive. The informational cognitive function of non-verbal communication culture is associated with the acquisition and correction by university students of socio-cultural values in the training and educational process and self-realization as a creative, unique individuality in the space of social interaction.

The study identified a set of principles that complement the conceptual basis of the process being studied; principles of cognitive mobility, nonverbal-semantic activity, poly-semantic nature, multiculturalism, complementarity of non-verbal senses and meanings, diversification and integration.

The following research methods were used to test the solution of the tasks: theoretical: problem analysis and synthesis of ideas that help to comprehend the category of university student non-verbal communication culture, analogy, generalization, concretization, abstraction, idealization, modeling of organizational and pedagogical conditions for the formation of youth nonverbal communication culture in vocational education, extrapolation of identified trends and patterns of nonverbal communication development in vocational education on the possibility of their use and application in practice of other educational institutions; generalization and comparison of domestic experience in the formation of university students non-verbal communication culture; empirical: ascertaining, forming, control experiment; mathematical statistics: statistical processing of questionnaire data and experimental results.
Experimental work was carried out on the basis of Kazan universities. (the sample of students was 294 people). Experimental work was built in the process of university student educational and extracurricular activities in the framework of vocational education, using the possibilities of educational disciplines, in the forms of lectures, seminars, master classes, mini-trainings, role-playing, business games, in the course of training practice; resources of scientific activity (conferences, seminars, round tables); various forms of educational work (debates, reviews, competitions, festivals, thematic and festive events, club meetings, actions, adaptation meetings).

The main stages of the study. The study included four stages.

The first preparatory stage, in the course of which the degree of the problem elaboration was studied in domestic and foreign science and practice, philosophical, cultural, psychological, pedagogical and socio-pedagogical literature was analyzed, and mass, advanced and innovative pedagogical experience was systematized. The problem area of research was defined and specified; the initial methodological positions of the research were formulated.

The second stage - conceptual and methodological, was connected with the formulation of the research hypothesis, the development of methodological, theoretical, organizational and pedagogical aspects of the problem. The concept of students’ non-verbal communication culture forming in vocational education was developed, on the basis of which a model of this process was built. The results of the theoretical research were embodied in the methodical accompany of the process of students’ non-verbal communication culture forming in the teaching and educational activities of the university.

The third stage - experimental one, was connected with diagnostic and organizational and practical work in educational institutions, chosen as a base for experimental work. The readiness of the pedagogical community to implement the proposed innovations was determined. Under the guidance of the authors, the teachers tested the elements of the model in the framework of educational, scientific, educational events. Master classes, round tables, methodological and methodical seminars with teachers were held with the purpose of developing in the pedagogical community of a value-semantic unity and an agreed understanding of non-verbal communication culture value in an educational institution and an open society. In the course of the experimental work, the hypothesis was checked; the individual provisions of the study were refined.

The fourth stage is generalizing-analytical. Interpretation and systematization of the data obtained during the research was carried out, textual registration of research activities results was carried out.

The analysis of practice made it possible to reveal the students' low level of communication culture, the presence of significant non-verbal incompetence, manifested in the educational environment. Student non-verbal competence is defined as one of the mandatory components and the necessary condition for their communicative competence, the personality trait, which includes the ability for non-verbal communication, knowledge, abilities and skills in the field of non-verbal communication, sensory and social experience in the sphere of nonverbal communication. The study reveals the interdependent nature and correlation of student verbal and nonverbal forms of communication in society as an environment for student youth life-activity in the educational, labor, household, leisure spheres. Process established that the most consciously and meaningfully used means of communication of student youth is speech, the importance of which is given special significance in the university educational process in the preparation of a future specialist with a high level of professional competence.

### 3. Results

An analysis of the peculiarities inherent in the process of student non-verbal communication culture forming has made it possible to reveal many conflicting sociocultural, socio-psychological, social and pedagogical factors of objective and subjective nature. The social, economic, cultural, ethnic and national characteristics of society, the processes occurring in
it and the changes associated with them are classified as objective. The research shows that the subjective socio-cultural and psychological-pedagogical factors in the formation of student non-verbal communication culture consist of a unique set of influencing each young person in the process of his or her personal and professional development of social institutions, the media, a micro-society, a real and virtual space of communication, personal experience.

The process of student nonverbal communication culture forming in vocational education included: the definition and approbation of methods to track the results of the selected criteria, the establishment at the search and ascertaining stage of the initial levels of student non-verbal communication culture formation, based on the criteria and indicators; the implementation of the model and monitoring the dynamics of the student nonverbal communication culture forming - at the corrective-forming stage; analysis of the results obtained and determination of the developed concept effectiveness - at the analytical-evaluation stage of experimental work.

At the search and ascertaining stage, the initial level of the nonverbal communication culture among university first-year students was diagnosed. It was taken into account that the nonverbal communication culture as a systemic personal education cannot be directly diagnosed on the basis of any one technique. A more accurate result can be obtained only by comparing different data, through the use of a set of techniques at each stage. The complex includes: a methodology for assessing the level of communication by V.F. Ryakhovsky (Karelin, 2007), "Value Orientations" technique by M. Rokich (Karelin, 2007), the technique of diagnosing emotional barriers in interpersonal communication by B.B. Boyko (2016), a technique for peer review of non-verbal communication by A.M. Kuznetsov (Karelin, 2007), questionnaires (author's questionnaires for the definition: values of the culture in activities, the level of the cognitive component of non-verbal communication culture, non-verbal competence, non-verbal barriers), as well as observation, expert interview, analysis of students' products.

The results of the search and ascertaining stage of the experiment made it possible to conclude that the formation of student non-verbal communication culture (the experimental group) that started their studies in the first year was mainly at a low (empirical) level (86%). These young people had low motivation to form a culture of non-verbal communication, their knowledge in this area was sketchy, superficial, and the skills were formed unconsciously, spontaneously, not allowing to influence the situation of communication; students showed a weak resistance to manipulative influences, carried out through non-verbal means and stimuli of the environment. Reproductive, involving a greater degree of awareness, the level of nonverbal communication culture formation, was revealed among 14% of the subjects (experimental group), of productive-creative (high) level was not demonstrated by the students at all. The revealed contradiction between the students' understanding of non-verbal communication culture's importance and the low level of its formation confirmed the need for a specially organized teaching and educational process to build a culture of student non-verbal communication at the university, allowing coming to the next stage of experimental research.

The second stage of experimental work (correctional-forming) was connected to the approbation of the model of student non-verbal communication culture formation in vocational education. At this stage, the tasks of developing motivation to enhance the culture of non-verbal communication were solved through adjustment of value-semantic attitudes; formation of a knowledge system in the field of non-verbal communication culture; development of personal qualities necessary for the manifestation of non-verbal communication culture (readiness for communication, empathy, receptivity, observation, sociability); the development of abilities and skills of comprehended non-verbal behavior, comprehended use of non-verbal means, the projecting of communication, taking into account their revealed meanings in the conditions of the educational process and in activities outside the university. At the corrective-forming stage, the reserves of facultative disciplines were used in educational activity, including such as "Culture of learning activity", in the process of comprehension of which in the first year of education young people thought about
the culture of behavior and perception, the culture of interaction and emotional culture manifested in activities. The most effective extra-curricular form of mastering the culture of non-verbal communication by students at this stage was the master classes "The Art of Speaking Silently" and "How to Get To Know the Interlocutor", stimulating interest and motivating a conscious attitude to non-verbal communication.

At 2-3 courses, students defined their abilities, their own possibilities, deepened knowledge about themselves, studying the discipline "Fundamentals of self-knowledge and self-realization of the individual," and made plans for self-realization. Students participating in the experiment comprehended the role of non-verbal communication culture in professional activity, continuing to practice practical skills of non-verbal communication, increasing individual non-verbal repertoire. Active practice in the summer camp, at school and social institutions contribute to this. During the training practice, students observed non-verbal manifestations of pupils, created non-verbal stimuli, organized an environment of various orientations (educating, developing, and relaxation).

In 4-5 courses, when the level of professional readiness increased, the understanding of non-verbal communication culture importance prompted students to choose an elective course "Culture of non-verbal communication for specialists in the social sphere", the degree of satisfaction from the study of which ranged from 92% to 96% in different groups. In the process of studying the discipline, students mastered diagnostic, teaching, developing, preventive, corrective technologies and techniques, including: the diagnosis of emotional states, the technology of communicative risks prevention, technology to overcome non-verbal barriers, visualization technology, case work, and case study. Practical development of non-verbal communication techniques took place in the form of: mini-trainings, business and role-playing games, and workshops.

Analysis of experimental work results shows that the formation of student non-verbal communication culture was influenced by their involvement in scientific work, which was expressed in mastering the skills of non-verbal communication and the culture of its manifestation to the audience when preparing speeches with reports, discussions on scientific topics during conferences, seminars, round tables. Thus, at the corrective-forming stage, there was a continuous and step-by-step complication of university students’ professional training forms and methods.

The analytical and evaluation stage included repeated measurements of the formation indicators of student non-verbal communication culture from experimental and control groups of the fifth year, their processing and analysis. The analysis of indicators dynamics on the value, personality, resource, behavioral criteria of the level of nonverbal communication culture formation during five years of students’ training at the university showed that the dynamics in the formation of student non-verbal communication culture in the experimental group was much more significant than in the control group. The results of respondents distribution according to the level of non-verbal communication culture formation (Table 1) lead to the conclusion that in the process of implementing the developed model and creating the appropriate conditions, there have been significant changes in the distribution of respondents by levels. For all the years of training, the indicators of university student non-verbal communication culture formation demonstrating high and medium level in the experimental group increased by 15% and 53%, and in the control group - by 6% and 17%, respectively. An important evidence of the proposed concept effectiveness is a significant excess of the proportion of tested ones in the EG in comparison with CG where the effect of a sufficient formation of non-verbal communication culture (not lower than the average) was observed.

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<th>Course of Study</th>
<th>The group under study</th>
<th>Levels of nonverbal communication culture formation</th>
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Table 1
Formation of non-verbal communication culture in EG and CG groups
To verify this conclusion, the zero hypothesis was formulated (H0: the proportion of individuals in the experimental group who had developed a sufficient culture of non-verbal communication during the training within the prognostic educational model does not exceed the proportion of persons in the control group who have developed a sufficient culture of nonverbal communication training in the framework of the standard educational model), as well as the corresponding alternative hypothesis (H1: the proportion of individuals in the experimental and control groups that have developed a sufficient culture of non-verbal communication is not the same, and their differences are not accidental and significant). A check of the differences significance was carried out using the angular \( \phi^* \)- Fisher criterion in accordance with the standard experimental results processing scheme. The conclusions thus obtained are consistent in a well-defined sense with the conclusions presented above. The advantage of the alternative hypothesis over the null hypothesis has been proved, since in accordance with the rules applied in the theory of statistical hypotheses testing, when the experimental value of the Fisher test is exceeded, \( \phi_{exp}=10.507 \) over such standard (conventional) critical values of Fisher’s statistics as, firstly, \( \phi_{cont}=1.64 \) (with significance level \( \alpha = 0.05 \), in other words, with a reliability of 95%); and, secondly, \( \phi_{cont}=2.31 \) (with significance level \( \alpha = 0.01 \), in other words, with a reliability of 99%). Additional evidence of the proposed method effectiveness is the significant (according to Pearson’s statistical criterion) excess in EG in comparison with CG of the tested individuals' proportion who had the effect of sufficient formation of non-verbal communication culture. In this case, the experimental (otherwise, calculated) value of the Pearson criterion \( \chi^2_{exp}=71.249 \) is greater than the standard critical values of Pearson’s statistics: \( \chi^2_{cont}=5.991 \) (with significance level \( \alpha = 0.05 \) and the number of freedom degrees equal to two) and \( \chi^2_{cont}=9.21 \) (at significance level \( \alpha = 0.01 \) and the number of freedom degrees is two). Thus, experimental work has shown that the proportion of people who have purposefully formed a culture of nonverbal communication in the experimental group is higher than in the control group. These differences are not accidental, significant, and are the result of using the developed concept of student nonverbal communication culture formation in vocational education.

The generalization of scientific achievements in the field of studying non-verbal means and analysis of their application in the educational practice of universities allowed us to conclude that non-verbal means used in students’ communication are conditioned by: a) the biological characteristics inherent in the psyche of each individual; b) the level of human culture, including the level of his professional education; c) the circumstances of their application; the nature of non-verbal means’ use in the process of communication, which depends on the personal and socio-cultural characteristics of communication’s subjects, technological components of teaching different disciplines in university practice.

### 4. Discussions

As a scientific category, the culture of non-verbal communication is new and undeveloped, although it’s very idea is embedded in the ethics, rhetoric, theory and culture of communication. In pedagogy, the culture of non-verbal communication is associated with the scientific formulation of the issues in pedagogical ethics, pedagogical culture and
pedagogical communication (Borozdina, 2005; Zhukov, Petrovskaya & Rastyanikov, 2014; Stanislavsky, 2017), but it has not yet been singled out as a special scientific category. The analysis of the works of foreign and domestic researchers in the field of non-verbal communication (James, 2008; Carras, 2007; Birkenbil, 2012), presented in the study, made it possible to reveal the predominance of the linguistic direction that is justified historically and prevalent at the present time in the interpretation of non-verbal communication. The generalization of scientific achievements in the field of studying non-verbal means and analysis of their application in the educational practice of universities allowed us to conclude that non-verbal means used in communication of students are conditioned by: a) the biological characteristics inherent in the psyche of each individual; b) the level of human culture, including the level of his vocational education; c) the circumstances of their application; the nature of non-verbal means’ use in the process of communication, which depends on the personal and socio-cultural characteristics of communication’s subjects, technological components of teaching different disciplines in university practice.

The non-verbal communication used in vocational education is viewed as a kind of communication, for which is characteristic: the use of non-verbal means as the main means of information’s perception and transmission, the image’s formation, the notion of a partner, the organization of interaction and the situation of communication, self-expression. The development of conceptual bases for studying the process of forming a culture of student non-verbal communication allows us to state that, unlike the tradition of accentuating the role of verbalization in the modern vocational education, from the standpoint of leading methodological approaches, the ideal of a young man prepared for professional activity correlates with a holistic culture of communication and a culture of non-verbal communication, particular. The verbal and non-verbal components of communication are in a relationship of complementarity. The result of student non-verbal communication culture formation in the process of vocational education is a modern young man who has a culture of value-mediated comprehended non-verbal behavior and communication.

5. Conclusion

Thus, the results of the research give grounds for the following conclusions:

1. The strategic orientation to achieve new results and a new quality of the Russian education has actualized the issue of increasing the culture of communication as an integral component of the specialist prepared for the activity, realized, in particular, in the specially organized pedagogical process of non-verbal communication culture forming, which is fundamentally important in the implementation of a multilevel and variative vocational education of students in the educational environment of the university.

2. Interdisciplinary analysis has revealed that the culture of student non-verbal communication is an integrative multi-level and multifunctional category that reflects value orientations for rapprochement of communication in the humanistic style and effective interpersonal interaction taking into account individual behavioral manifestations of communication’s subjects.

3. The process of student non-verbal communication culture formation in the process of vocational education contains methodological grounds, including regularities, factors, a set of leading approaches (synergistic, value-semantic, socio-pedagogical) and forming principles (cognitive mobility, non-verbal semantic activity, poly-semantic nature, multiculturalism, complementarity of non-verbal meanings and values, integration and diversification).

4. The main socio-cultural, socio-psychological and socio-pedagogical factors in the student non-verbal communication culture formation in the process of vocational education of negative and positive orientation, reinforcing and complementing each other, are objective (global and domestic) - social, economic, cultural, ethnic and national characteristics of society, the processes occurring in it and the changes associated with them; and subjective - the totality of influencing each young person in the process of his or her personal and professional development of social institutions, the media, the micro-society, the real and virtual space of communication, personal experience. The results of this study can be used...
in the creation of educational concepts, programs for continuous vocational training in the field of vocational education, in the training of students in various specialties of the social sphere, additional vocational education in the process of its socio-cultural modernization and professional development of specialists.

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