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Integral Unity of Cognitive and Emotional Components of Personal and Professional Development of Teachers

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Abstract

The relevance of the following article is caused by transformations in the social and economic levels of the development of Russia in the modern period, implementation of new legal documents, development of new educational standards, consideration of professional needs according to which it is necessary to increase the level of personal and professional development of a pedagogue. In accordance with this, the current article is focused on the development of innovative technologies, which will lead to the efficiency of the following process. Methodological bases of the research involve the following approaches: system, personally-oriented, problem and situational, innovative-reflexive; principles: cultural identity, pedagogical and information technologies integration, cooperation, activity, supplying integral unity of cognitive and emotional components in the personal and professional teachers' development. The article revealed the integral unity of cognitive and emotional components of learning in the process of acquiring scientific knowledge; functional algorithm of processing information was created and realized in the process of professional training of future teachers. As a technological mechanism supplying conditions for the Art (creativity), mentality and emotion control, as well as achievement of professional success on the basis of openness of emotional- image potential of the intellectual activity art-technologies are being studied.

Keywords: integral unity, cognitive component, emotional component, personal and professional development, teacher, art technologies.

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Introduction

The problem of teacher training in the conditions of transformations on the social and economic levels, implementation of new legal documents, development of new educational standards, taking into consideration professional needs, is up-to-date and significant.

The concept "teacher" is related to the type of "human-human" profession, the main features of which are connected with the interaction between completely different people, the ability not only to establish but also to maintain contacts between them, to understand them, as well as to comprehend their specific features of character and behavior. In the professional sphere of education, teaching profession is characterized by special requirements for the individual training of a specialist in the relevant field and is associated with a personality who is interesting and important for the people around him/her, in particular for students (school-children, university students, listeners etc.).

Analysis of the conducted research in the professional sphere of Russian Pedagogy, showed that in different periods of time the problem of personal and professional development of teachers was solved via means of forming professional and value orientations (Mikheeva, 1996), the development of communicative potential (Lashkova, 2011), ethno-pedagogic culture (Ishmullina, 2011), the ability to interact with the family (Smirnova, 2013), value attitude of students' personality (Pazukhina, 2012), as well as the formation of management (Shamina, 2013), information (Afanasieva, 2012), communicative (Shatrova, 2010) and other types of competencies. The need for personal teacher development can be traced in many European documents, such as the Memorandum of continuing education of the European Union (2000), the Manifesto "Education for change – changes for education, teachers' Manifesto of the XXI century" (2015), "Manifesto of adult education in the XXI century" (2016), which are designed to actualize the task of formation of key and universal professional skills of future teachers.

It is obvious that teacher's activity is deeply inter-connected both with professional and personal aspects. This link is considered to be the main tool and means to achieve constructive training of the modern teachers. As it is defined by one of the supporters of the personal approach in education V. Serikov, "... pedagogical activity is one of the few unique realities in which a person not only mediates, but determines the purpose and content of the educational process" (Serikov, 1999). In the works of Rogov (1999) and Sherayzina (2012), the need for the creative mutual enrichment of a teacher's personality as a specialist is emphasized. The personal and professional aspect of teacher development is also embedded in the context of a number of theoretical concepts, for example: the concept of continuous self-development (Karakovsky, 1992); the concept of uniqueness of each person in the awareness of his/her anthropological and social difference from all other "homogeneous systems" (Gorshkova, 2012; Kudryavtseva, 2007); the concept of "self-actualizing personality" (Maslow, 1999); the concept of actualization of the activity of professional consciousness of personality and activity as "the most integral integrative characteristics of the whole way of life of a person seeking to achieve full self-determination and self-identification" (Slabodchikov, 2005).

Based on the analysis of pedagogical literature, the authors share a point of view of Mitina (2014) who considers the personal and professional development of teachers as an active qualitative transformation of the individual inner world, the determination of his/her activity, resulting in a

completely new way of professional work, continuous improvement of professional competence, as well as the continuous development of teacher's personality, resulting in positive self-perception (self-confidence and abilities, sustainable motivation for continuous education and self-improvement).

In this article, the authors prove their scientific opinion for the solution of the problem of personal and professional development of teachers on the basis of the integral unity of the cognitive and emotional components of their development in the context of interdependence of scientific and emotional-value, imaginative and creative mechanisms of knowledge.

Materials and methods

The goal of the research: development of innovative technologies to ensure the integral unity of cognitive and emotional components of personal and professional teacher development.

The methodological basis of the research includes the following approaches (system, personally-oriented, personal-activity, problem, situational, and innovative-reflexive); principles: (cultural identity, pedagogical and information technologies integration, cooperation, activity).

The importance of the *system approach* in our study is that it allows one to: consider the integral unity of the cognitive and emotional components of the personal and professional development of teachers as an integral system; set up and clarify the goals of this system; determine the functions, levels and stages of the process; the dynamics of its functioning.

The integration of cognitive and emotional components of personal and professional development of a future teacher with the implementation of *personally-oriented* approach provides support for the potential of student's personality and the development of his/her inclinations and abilities; represents a natural interaction of a teacher and students, during which the teacher creates conditions for self-development of students. In the personally-oriented approach the personality of a student, the development of his/her individual abilities of teaching activity play the significant role, which allow to:

- organize the process of interaction between teachers and students in the process of formation of a culture of communication, taking into consideration personal features of students;

- create conditions for the realization of individual abilities of students, to determine their activity and to form motivation for learning activities.

At the present period of professional (teacher) Education development the *personal-activity approach* becomes the most perspective. In our study, according to the authors' scientific position, the implementation of this approach is that future teachers are considered as a subject of activity, who possesses their own specific features that influence on their professional pedagogical activity.

Personal-activity approach to the learning process is the conceptual basis of another approach, *problem and situational approach*. The implementation of the latter, in relation to the integration of cognitive and emotional components of personal and professional development, is realized via introduction of problem situations in the educational process that are as close as possible to real-life conditions. The need to use this approach is explained by the relevance of the formation of a future teacher's ability to maintain control in a stressful situation, because it is "in the act of a person he/she becomes an integral personality, manifests him/herself without changing" (Serebryakova, 2012).

Innovative-reflexive approach stimulates interest towards professional problems; defines socio-professional and socio-cultural attitudes and values of teachers (as a result of the use of collective forms of solving social problems, professional self-education, the ability to reach a compromise in inter-relations and communication, awareness of the importance of the value of professional way of thinking, etc.).

In accordance with the above mentioned approaches, the authors of the article have defined a number of principles:

- the *principle of cultural identity*, aimed at the cultivation of certain ethnic teacher's attitudes in relation to the existing norms, rules, principles, customs and traditions in society. Becoming the bearer of cultural and historical values of the country, a teacher perceives, reproduces these values and strives for creativity of new cultural realities;

- the *principle of pedagogical and information technologies integration*, providing improvement of quality of integration of cognitive and emotional components of personal and professional teacher development according to requirements of modern information society via implementation of the latest information technologies and the corresponding software in the educational process;

- the *principle of cooperation*, ensuring the formation of subject-subject relations between the participants of the educational process, the recognition of the equivalence of each other, the manifestation of respect, trust and individual responsibility for building up dialogue relations;

- the *principle of activity* providing that personal and professional teacher development in the integral unity of cognitive and emotional components occurs successfully at the expense of an active life position and self-realization of a person in the professional and pedagogical activity oriented on receiving, processing and the analysis of new information and knowledge.

As part of the research on the problem of integral unity of cognitive and emotional components of personal and professional teacher development, the experimental part of the research was carried out on the basis of Kazan universities (representative base of students was 208 people from the final courses) and was created in accordance with the process of both educational and extra-curricular activities of students in the context of professional and pedagogical education using the possibilities of academic disciplines, in the forms of lectures, seminars, workshops, mini-trainings, role-play and business games, during the educational practice, as well as resources of scientific activities (conferences, seminars, round tables) and various forms of educational work (debates, reviews, competitions, festivals, thematic and festive events, promotions, adaptation fees, etc.).

The first stage of experimental part of the research was corresponded to the theoretical analysis of literature on the studied problem, determination of a strategic position, object, subject, goals and objectives of the research, the formulation of a working hypothesis, the identification of criteria, indicators of evaluation of the studied process, conducting of stating experiment and processing of its results. This stage was accompanied by the use of theoretical (theoretical analysis, conceptual analysis, historical analysis of the problem, generalization, structuring, abstraction) and empirical (conversation, testing, questioning, ascertaining experiment) methods.

The second stage of the experimental part of the research was characterized by the development and implementation of technologies that ensure the integral unity of cognitive and emotional components of personal and professional teacher development, experimental verification of its effectiveness and developed methodological tools of pedagogical support of the process. The main methods of research at this experimental stage were: modeling, comparison, systematization, questioning, testing, expert evaluation method, forming experiment, graphic methods, mathematical and statistical methods.

The third stage of experimental part of the research was connected with the systematization, analysis, evaluation and interpretation of the results of experimental work, theoretical understanding and generalization of the main conclusions on the studied problem, the design of the study results and specification of future perspectives. The methods used at this stage: analysis, synthesis, comparison,

generalization.

Results

The process of learning (cognition), being a feature of human thinking, is carried out with the implementation of two mechanisms: the first promotes the implementation of work with symbols and their semantic meanings and is controlled by rational and logical thinking, the second determines the importance of work with models of images and is controlled by imaginative thinking. Both types of thinking, carried out in different hemispheres of the brain, are independent channels of processing ideas about the world around (Figure 1).

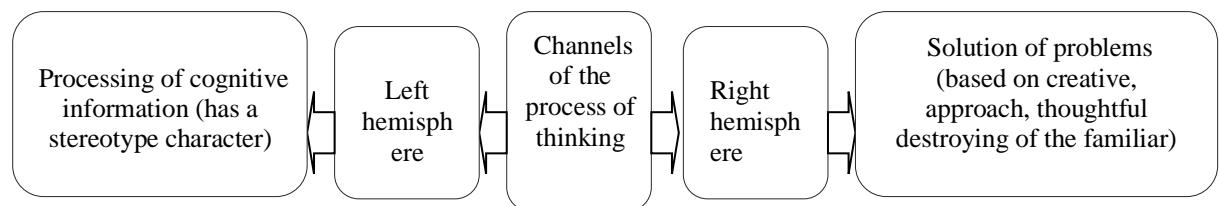


Figure 1: Scheme of processing information in the process of thinking

In its turn inter-connected work of left and right hemispheres is determined by the specific features of thinking and behavior of a personality (Figure 2).

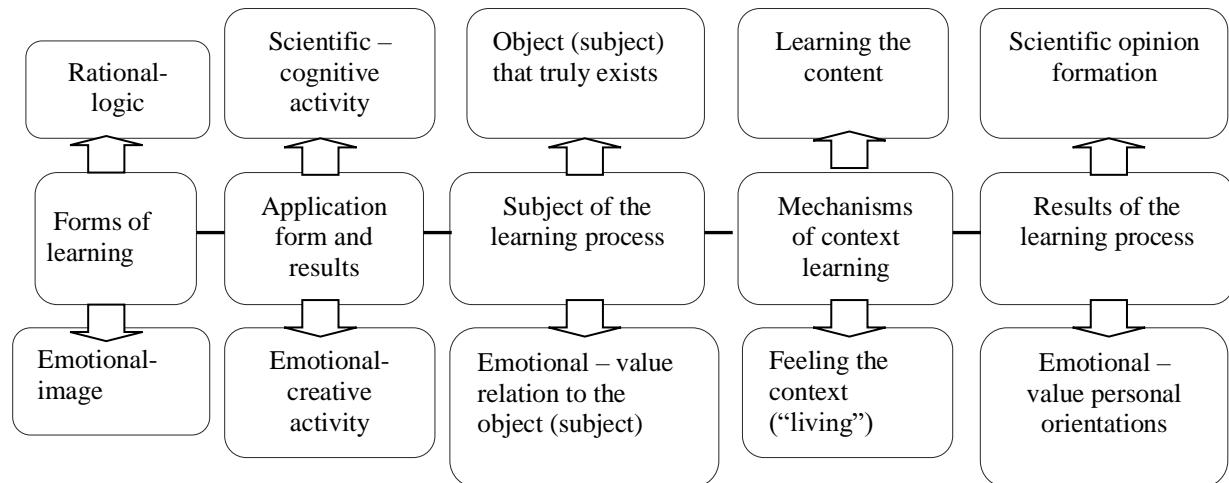


Figure 2: Features of integration of cognitive and emotional components of learning in the process of acquiring scientific knowledge

The observed technocratization of Education since the beginning of the XXI century, designed to improve the efficiency of the cognitive process, is accompanied by the implementation of an emotional component that provides the development of image perception, the actualization of emotional memory, the development of the ability to empathy, the creation of conditions for awareness of one's inner world, etc. (Mukhametzyanova, 2015). In this respect, in the number of literature sources the need for the interconnection of cognitive and emotional processes is emphasized (Lozinskaya, 2007; Mukhametzyanova et al., 2014; Fort, 2006).

Thus, in solving the problem of personal and professional teacher development, according to our scientific opinion, an important aspect is the effectiveness of processing of educational information, which occurs when implementing cognitive and emotional components of knowledge on the basis of the following integrative indicators: attention, memory, desire, perception, thinking, speech, emotions (Table 1).

Table 1: Functional algorithm of studying information procession in the process of future teachers' training

Oper ation of algorithm	Markers of integral unity of cognitive and emotional components of learning	
	Cognitive	Emotional
<i>Defini ng the requirements</i>	-learning of initial conditions in the task, initial data	- emotional – value relationship to the initial conditions and data
<i>Analy sis</i>	<ul style="list-style-type: none"> - logic evaluation of obtained knowledge for the performing of tasks, getting correct results, - decomposition of the object on the components, - defining different aspects and 	<ul style="list-style-type: none"> - emotional evaluation of the obtained knowledge for performing of tasks, getting correct results; - emotional judgments about different aspects and characteristics of the object etc.

	characteristics from the integral composition; - exclusion of non-sufficient and etc.	
<i>Design</i>	- association - creation of paradigm inter-connections	- emotional – image association and etc.
<i>Realization</i>	- representation of thinking activity in speech form or action - performing of labour function	- emotional – image and speech interpretation of the object of learning
<i>Integration</i>	- composition of actions and thoughts in the integral unit	- emotional – value concept of integral unity of actions and thoughts
<i>Presented versions</i>	- final variant of expressing logical form of thoughts, ready product, solved objective, performed task	- emotional intelligence

In accordance with the cognitive theory, teacher training is not only the transfer of a certain amount of information, it is aimed at the development of teachers, along with the ability to perceive the training material (through the performance of higher mental functions: thinking, knowledge, understanding, consciousness, visual perception, etc.), the need to use it and, what is significantly important in the modern context, constantly update it (Serebryakova, 2012, p. 126).

Logical-verbal thinking (Bulatova, 2005) in the educational process allows through the formalization, schematization and systematization of the results of mental activity to choose from all the relationships the only one that is the most significant. As a process, logical thinking is based on the gradual realization of mental operations. In the context of the application to the educational process, the sequence of the latter is implemented in a phased order of the following actions:

- *Defining requirements* (study of the initial conditions of the task),
- *Analysis* (evaluation of the obtained knowledge for performing of tasks, getting correct results; decomposition of the object on the components; defining different aspects and characteristics from the integral composition; exclusion of non-sufficient etc.),
- *Design* (association, creation of paradigm inter-connections),
- *Realization* (representation of thinking activity in speech form or action, performing of labour function), *Integration* (composition of actions and thoughts in the integral unit),
- *Presentation versions* (final variant of expressing logical form of thoughts, ready product, solved objective, performed task etc.).

Since mental activity is always carried out in the speech form, speech "design" is a necessary condition for the materialization and subsequent existence of reasoning. This, in turn, involves a mandatory logical analysis of speech as a means of expression of thought, carried out in order to identify the elements of its logical form (Bocharov, Karpenko, Vorob'yova, Bernshtejn, 2019).

Moreover, within a teaching profession, the personal and creative component is important, the development of which can be carried out via means of special technology that contributes to the manifestation of emotional and value reaction to the considered pedagogical positions. Such a technology can be Art-technology (Mukhametzyanova et al., 2018), the main features of which are deep

individualization, creative nature of activity and the desire to penetrate into the nature of personal expressiveness, which ensure the development of professional and creative potential of an individual through a system of emotional-image mechanisms. In the process of implementing these technologies:

- Motivation-value attitude of students to the content of education is formed;
- Sustained attention on the basis of emotional perception of educational material is maintained;
- A feeling of looseness, freedom, disposition to the interlocutor is achieved;
- The ability to translate knowledge into personal meaning is formed;
- Positive creative well-being is developed.

The main postulates of art technology, based on the unity of personal characteristics and artistic laws, are presented in Figure 3.

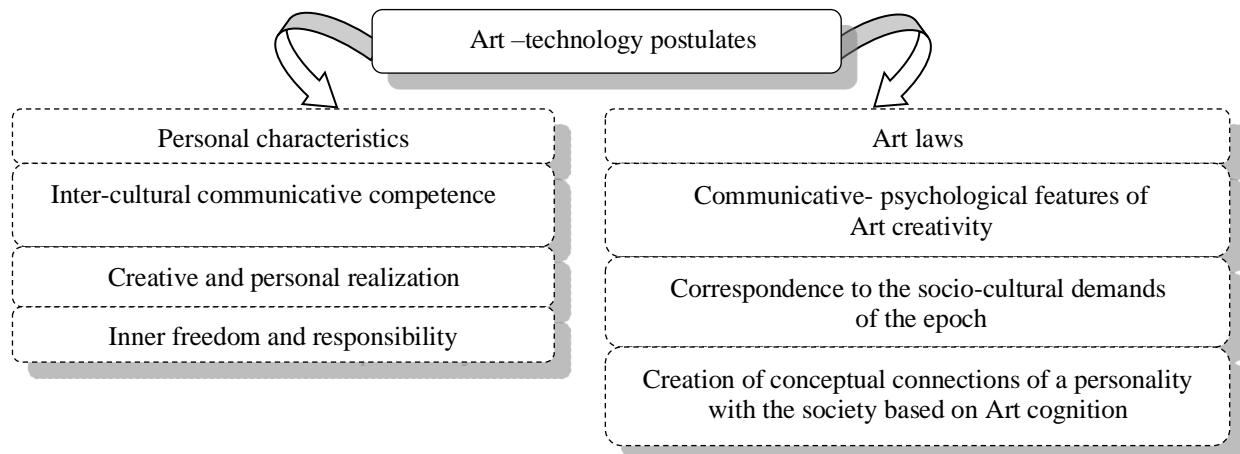


Figure 3: Main postulates of Art-technology

The context of Art-technology is oriented on:

- disclosure of universal developing, cognitive and information possibilities of Art, as well as search for ways to implement them to ensure personal and professional development of the teacher;
- creation and implementation of programs of socio-cultural adaptation of teacher's personality;
- assistance in the formation of students' principles of mutual support of teachers, mercy, responsibility and self-confidence, the ability to actively interact without prejudice to the rights and suggesting freedom to another person;
- teaching positive strategies of teacher's self-realization in the cultural space of the society.

Questions for discussion

The problem of choosing technologies that contribute to the integral unity of the logical and emotional components of personal and professional teacher development is issued sufficiently in the modern psychological and pedagogical research. Ivanova's (2007) work is devoted to the development of the technology of remote support of the relationship between logical and emotional components of intelligence, in which the author substantiates the need and describes the mechanism of the remote Internet simulator. In the study of Manojlova (2004), acmeological exercises for the development of the relationship of logical and emotional components of personal and professional development are presented, classified in groups of self-knowledge and self-management of their emotions; knowledge and control of the emotions of others. The goal of the exercises developed by the author is to enhance skills on understanding their own feelings and emotions; to analyze actions; to trust themselves; to express their own feelings; to regulate aggressive and stressful conditions; to monitor thinking and to change the point of view. The use of exercises in the educational process is recommended to ensure the integral unity of the cognitive and emotional components of the personal and professional teacher development, because, according to the authors' opinion, they contribute to the formation of positive self-esteem, understanding the emotions of other people, empathy, providing emotional support to the partners of communication, confidence in communication. A significant role in the process of integration of logical and emotional components of personal and professional development is given to reflexive abilities. So, for example, Hlevnaya, Kisileva and Myl'nik (2013) are considering the possibility of development of this integration within Technology of focused educational influence. The authors state that an effective means of improving the overall level of intelligence of the individual is a focused influence on its emotional components. Trainings on the development of cognitive and emotional components of cognition in their integral unity are becoming more and more popular. Thus, "EQuator" is the first company in Russia, which is engaged in the development of cognitive and emotional intelligence since the beginning of 2003 (St. Petersburg) (Training company EQuator, 2016). The following training system is aimed at developing students' ability to over-estimate the impact of their feelings on their own psychological state, to sensitively capture their main values, to intuitively choose the best way of behavior in a difficult situation (perceiving the picture as a whole thanks to their flair), etc. As for Art-technologies, special research on their use to ensure the integral unity of the cognitive and emotional components of personal and professional development teachers is not enough. We consider Art-technologies as a technological mechanism that creates conditions for creativity, control over thinking and emotions, as well as gaining professional success on the basis of realization of the emotional and imaginative potential of the intellectual activity of future teachers by means of Art (Mukhametzyanova, 2015).

Conclusion

1. The analysis of the research of Russian and foreign scientists on the problem of personal and professional development of teachers allowed establishing that efficiency of their professional achievements in a certain degree is emphasized by positive interrelation between logical and emotional components.

2. Cognitive mechanisms, in particular cognitive modeling, are considered to be a scientific and methodological resource of personal and professional teacher development (Kamaleeva et al., 2018), which is treated as a multi-stage process (Kamaleeva, Gruzkova, & Muhametzyanova, 2018), aimed at the formation of its cognitive tools and including the consistent implementation of actions on: the formulation of the goal – the desired results to be achieved; the study of the situation via the collection, analysis, processing, systematization of information; identification of factors that contribute to strengthening or reducing the ability and willingness of students in the process of dialogue to express themselves as a personality, to understand the essence of the "thought of another person", spiritually enrich the experience of another person; determination of the relationship between the factors by considering the cause-effect chains to reflect the system of interaction between a teacher and a student.

3. Art-technologies have been developed to ensure the integral unity of the cognitive and emotional components of personal and professional teacher development in order to develop their attitude to the professional activity as an emotional and intellectual process aimed at dialogue and cooperation of its participants and based on the implementation of the following functions: cultural, artistic and communicative, aesthetic, creative and hermeneutic, interpretive, protective (Kamaleeva, Gruzkova & Muhametzyanova, 2018).

In the future, it is planned to enrich the types of technologies as a synthesis of two areas of scientific knowledge (Art and Pedagogy), ensuring the integral unity of cognitive and emotional components of personal and professional teacher development and contributing to the effectiveness of the studied process.

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