

Self designing of professional development has a complex structure, due to a number of assumptions. However, the identification of the component structure of this phenomenon makes it possible to justify the characteristics and specificities of complex integrated self designing activity and allows us, based on the selected structural components (cognitive-designing, creative-pragmatic, reflective-prognostic) to develop criteria and indicators of the ability for the self professional development. The degree of manifestation and of formation of these indicators reveals the levels of the development capacity for the self professional development of graduate students in the process of musical training in pedagogical universities that further research will be the basis for a diagnostic experiment.

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**THEORETICAL AND METHODOLOGICAL ASPECTS OF  
FUTURE PRIMARY SCHOOL TEACHERS' TRAINING FOR  
THE FORMATION OF YOUNGER STUDENTS' CULTURE OF  
THINKING**

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*Abstract.* The article considers theoretical and methodological aspects of would-be primary teachers' preparation for the formation of younger students' culture of thinking; there have been elaborated guidelines concerning the formation of non-conventional

*thinking of would-be teachers which create special conditions for self-realization, stimulate students' creativity development, and provide excellent mathematical training.*

*Analyzed components of the phenomenon readiness of a would-be teacher for the formation of the culture of thinking of younger students proved the fact that the formation of logical thinking should be done in the process of professional teachers' training as it provides the development of cognitive abilities, thinking, memory, ideas, language), algorithmic culture, skills to establish causal ties between various phenomena, ground the statements.*

*It has been proved that the formation of younger students' culture of thinking foresees the development of motivational, cognitive and social spheres of a personality. It is a dynamic system that embraces all the links of the educational-upbringing process: the aim, content, forms, means and is aimed at acquiring by the would-be specialists of strong knowledge, development of intellectual, creative and communicative skills, upbringing of emotive and volitional qualities.*

**Keywords:** *formation of culture thinking, younger students, would-be teachers' training, lessons of mathematics and information technology at primary school.*

The analysis of research on training elementary school teachers and our experience shows that many of the graduates reveal a sufficient level of knowledge on the subject and are able to apply this knowledge in a familiar situation. However, in case the situation changes, most of them get lost and see no ways out of it. This demonstrates the inability to integrate received methodical knowledge with didactic, psychological to see a new problem and find the ways of solving it, to orientate freely where and how the received knowledge can be used. Thus, this fact is essential to take into account while training the relevant staff, including teachers-professionals of a new generation who share a common and teaching culture, realize the tendencies, systems of modern psychology and pedagogy and able to use new educational technologies in primary school.

Considering the aspect of our study, we examine the logical necessity of preparing future primary teachers who have had not only knowledge, abilities, skills, and ways of mental activity. Teachers must be familiar with the basics of logic in order to equip children with the culture of thinking. At this time, the content of education will help students mastering logical methods and ways of life, expanding the world outlook; forming abilities of rational organization of thinking activity, education autonomy in the process of gaining knowledge; development of logical thinking; ability to think, to judge, to prove; fosters interest and the need for new knowledge, an opportunity to "discover" new knowledge, acquire new methods of work.

*The aim* of research is to clarify the status of intelligent logic problems in modern schools with children of primary school age in higher educational institutions in the process of future professionals training.

The studies on the development of logical thinking in general theoretical terms has been the subject of many studies (V. I. Andryeyev, F. N. Honobolin, A. P. Dyakov, I. Ya. Lerner, N. Yu. Postalyuk, V. O. Slastonin, and I. F. Harlamov, H. I. Schukina). The problem of creating a culture of thinking students is considered in psychological and pedagogical literature: first, the works devoted to the description of other parameters of logical thinking, its concepts and terminology (H. S. Altshuler, V. I. Andryeyev, G. S. Batyshev, D. B. Bohoyavlenska, L. S. Vygotsky, L. L. Hurova, I. P. Kaloshyna, Ya. A. Ponomarov, S. L. Rubinshteyn, Yu. A. Samarin, V. S. Shubynskyy, V. A. Yakovlev etc.); secondly, the works related to the study of the individual as a subject of creativity and the creative personality (K. A. Abdulhanova-Slavskay, O. G. Asmolov, N. M. Borysenko, O. M. Leontyev, V. S. Merlin, V. S. Shubynskyy etc.).

In order to develop the readiness of teachers to culture thinking formation of an individual student it is important to establish in educational institutions an atmosphere of creativity, conduct training role, business games. Effective for the development of a teacher's vocational skills are role trainings, the participants of which are divided into three groups: the "teachers" (1-3 persons), "students" (4-12 people), "experts" (1-3 persons). The instruction according to the task is offered for each role. Here is an example of the role training.

*Tasks.* Consider the logic of themes explanation (to your choice, taking into account teacher's qualification). For instance, the math lesson in grade 1, the theme - "Addition and subtraction within 10". The participants are divided into groups: "teachers" (3-4 persons), "students" (12-13 people), "experts" (2-3 persons).

*Instructions for the "teacher".*

Imagine that you are conducting a lesson of mastering new knowledge in mathematics in grade 1. You need to create a problematic situation; all students should be drawn to its analysis, using heuristic methods.

*Instructions for "students".*

The teacher conducts his first-lesson with you, 1<sup>st</sup> grades; being interested in teacher's individuality, first time you participate in the process of analyzing a problem situation. You are interested, but have difficulty in teacher's understanding, so you answer first at random. The teacher consistently leads you to understanding of the material content.

*Instructions for “experts”.*

Observe carefully the process of “teacher’s” actions who tries to involve “students” to the problem situation and its analysis. Analyze to what extent the methods and techniques, the types of tasks that have been used by the “teacher” in his work, activate pupils ‘cognitive activity and are appropriate to their age differences. Evaluate “teacher” activity using the 12-point scale.

Our long-term study of the phenomenon of future teachers’ readiness to form logical thinking of primary school children showed that it is expedient to distinguish in its structure motivational, intellectual, active and evaluative components.

Motivational component of would-be teachers foresees: the presence of positive motivation to learn; having interest in values teaching activities; positive attitude towards teaching profession of primary school, objective view of the characteristics and conditions of professional activity; desire to pedagogical self-expression, self-improvement; responsibility for the tasks associated with the formation of logical thinking in primary school children.

Intellectual component contains: the level of general intellectual abilities, the attitude to creative mental activity when working with younger students; completeness of formation of logical operations (analysis, synthesis, classification, abstraction, comparison, generalization, etc.), the ability to define logical laws; knowledge of the organization of training activities with primary school children, focus on updating their knowledge in order to create cognitive independence; ability to practice logical techniques, deductive games in order to develop logical thinking in primary school children.

Active component is characterized by: the presence of communicative abilities, skills of properly and logically expression of their opinions, argue, debate; ability to diagnose the level of logical thinking of primary school children; ability to attract younger students to collective organized play, which contributes to their logical thinking; ability to plan and organize their activities during school hours to build logical thinking in students youth; ability to establish friendly relationships with colleagues, students and parents in the process of professional activity.

Evaluative component involves: the presence of stable tendency to introspection and self-assessment of their skills and professional activities aimed at forming logical thinking in primary school children; ability to master the methods of psychological and educational assessment, verbal

skills impact on the individual child in the classroom; ability to assess accurately the results concerning the level of logical thinking of primary school children; ability to assess objectively the progress of the formation of logical thinking in primary school children; the ability to monitor, evaluate and correct errors during formation of logical thinking in primary school children.

We believe that all our distinguished components of future teachers to form logical thinking of younger pupils are interrelated and interdependent, so should be considered together.

Undoubtedly, the thinking training in the classroom in primary school promotes creative mathematical abilities development in primary children. However, as practice shows, the due attention is not always paid to this question; either the lack of time or the teacher doesn't have at hand such exercises that require creativity, ingenuity, i.e. those that could be used for the purpose of training young students' thinking.

The results of observations of the educational process in schools, communication with experienced teachers and those who are beginning their professional activities, attending classes of teaching students' practice in secondary schools revealed that the problem of logical thinking of primary school children as one of the most pressing in educational institutions. For this reason we call some of the major deficiencies that today, as noted by teachers in charge of students' practice characterize some professional skills of future teachers.

1) Our observations indicate that the students-practitioners, organizing the study of different sections of the initial course of mathematics assumed many mistakes in solving logical problems and exercises. There is a lack of professional knowledge, the use in teachers' practice, along with the original proven means of new approaches to solve logic problems, their implementation in their activities.

2) Some students do not realize that the methodology of teaching work is intended to achieve maximum saturation performance of every hour of school work. They do not use time efficiently and therefore it is not enough to solve the exercises and problems of logical capacity.

3) Students do not always use a differentiated and personalized approach to learning, unaware of abilities, interests, aptitudes and passions of each child that are necessary to create all conditions for their development.

4) Insufficient attention is paid to the geometric material development of logical thinking in the teaching of mathematics in primary classes.

5) Students should demonstrate the capabilities of advanced training, which can significantly increase the strength of knowledge and pace of learning the material without overloading children.

6) In class there is no bright visual aids, which promote dynamic and emotional pedagogical process tables, graphs, charts, as a means of visual interpretation of this arithmetic facts are not always used.

With this in mind, we have developed guidelines for primary school teachers on forming logical thinking of younger pupils to help achieve positive results in study.

1) You must give up the monotonous, template behavior, uniformity when applying logical material, and use the game techniques, visualization, interactive technologies for productive learning.

2) Differentiation and individualization of primary education link is achieved mainly by varying the pace of learning material, providing children with opportunities for selection of activities, adaptation of tasks to individual capabilities of students etc.

A young teacher today must not just understand the tasks that stand before him, but also to form them on the basis of social and pedagogical situation, in which he works. In this lies the launch of the social position of young teachers. A teacher who is working on his self-education and scientific-pedagogical analysis of children, provides a scientific and pedagogical thinking, intellectual skills, acquires high creativity.

A teacher-practitioner and a teacher-researcher relate differently to teaching practices. The first uses it as methodological support and the second, in addition, creates a model in the research and makes adjustments to it in the training course, considering the obtained results. Transfer to their own creative work requires specialized knowledge not only in the field of pedagogy, but also the operation of the laws of science, how to select and formulate the subject of study, research a problem or a hypothesis.

3) Traditional explanatory illustrative technique, on which schooling is often based, is insufficient to solve logic problems, exercises. It is also clear that its objectives cannot be conducted in isolation from researches on the characteristics of thinking of students of primary school age. Therefore, in practice we use the results of the study of psychological and educational researches of L.S. Vygotskiy, P. Ya. Halpyerina, L. V. Zankova, V. V. David etc., who proved to be highly effective in the development of children. You must use active teaching method in

mathematics and information technology courses to develop logical thinking of students [2].

Thus, new knowledge is introduced through the transfer of existing knowledge; and through independent “discovery” by children. Setting learning tasks provides the motivation of a concept. To make learning more interesting for every child a method that can be called “anticipatory diversity” is used. After the introduction of the concept, which requires working out for a long time, we acquaint students with such mathematical facts that are not required as learning outcomes in this age group, and contribute to the development of children, their world outlook, and the formation of interest in mathematics, prepare for further and deeper study of mathematical concepts. Thus, the training exercises are performed in parallel with the study of new mathematical ideas, so they do not tire of the children, especially being given the form of a game (encoding and decoding, riddles, etc.).

All the system of logic problems is constructed in such a way that with the development of computer skills, skills of drawing and calligraphy students effectively promoted in the development of mental operations, the ability to analyze, compare, summarize, classify, reason by analogy. From the very first lessons students are offered the tasks that require from them creative participation (“create”, “find”, “make”, “select”, “draw”, etc.), develop not only the mind but also the will, feelings, spiritual needs and motives of activity.

Any learning process starts with a pulse, which leads to action. A surprise is required that comes from the inability to provide an instant realization of a phenomenon.

The feature of the active method is that the new mathematical concepts and relations between them are not offered to children in a ready form. [5]

At the lessons of introduction of new concepts children “discover” their own during independent research. The teacher only makes this activity and sums up at the end, provides definitions of possible set actions. Thus, students build “their” math because mathematical concepts are interesting to them and clear.

Modern technologies create the conditions for creativity, encourage students to think independently. Kids look for new ways to solve problems, new properties of objects under consideration, new links in the learning material

5) It is known that development takes place where there is a new subject learning. As for younger pupils the novelty category relates

primarily to emotion rather than meaningful content. This explains the rapid loss of interest in certain activities, switching attention of children. Therefore, they should be directed not only to the performance, you should also make an attractive and interesting way and the process of knowledge (including didactic active games, bright clarity, and “interesting facts” in the educational process).

6) Logic tasks are not time consuming, otherwise the turn into boring exercises.

To sum up, we state that in case of problems in formation of logical thinking of primary school children we advise students to apply to aids and textbooks of elementary school mathematics and information technology, where samples of proper construction of the relevant logic problems are presented.

Thus, the present demands the teacher the search of new, effective methods to improve the quality of students’ knowledge of mathematics and information technology. Experience shows that introduction in the content of general secondary education the course of “Logics” as a separate academic discipline helps students to master the logical ways, broadening the outlook; formation of skills to organize thinking activities rationally, education autonomy in the process of gaining knowledge; development of logical thinking, the ability to think, to judge, to prove; cultivating an interest and need for new knowledge, an opportunity to “discover” new knowledge, acquire new methods of work.

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## COMPETENCE PARADIGM IN HIGHER ART EDUCATION

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**Abstract.** *The article analyzes the views of contemporary scholars on the nature of the competence approach. Features the particularities of the introduction of competence-based approach and the ways of its implementation in higher education. The competence approach to the professional training of the experts in a higher school has recently become an object of lively discussions in the community of our country and abroad. Despite of the common increase of research activity the problem of the education's competency has passed into the practical elaborations. It mainly concerns the revealing of the future experts for the purpose of creation the standards of the new generation. There is an attempt to take into consideration the particularities of our domestic labour-market with the less examination of the necessity of designing the competences in the course of European education dialogue. Nowadays there is a multitude of publications that have a broad enumeration of the competences according to the certain specialities. The numerous discussions about the nomenclature and competence classification are quite important, but they cannot replace the understanding of its essence and identity. It is thought that within the competence approach should be distinguished two aspects as well as within any other object of scientific-cognitive and practical activity. They are: phenomenon and essence [1]. As far as penetration into the depth of things make up the main task of science, from the scientific point of view the problem of competence approach must be solved not only as fixation of its manifestations in the teaching practice but first as the comprehension of the essence of the competences and competency. In the fifth place the contemporary comprehension of the competency implies the obligatory involving of future expert into the interdisciplinary relations. The general methodological basis of the competence approach must become an integration of the educational scope. The realization of above-mentioned statements in the educational environment of a higher educational institution will ensure the solution of strategical task that is to train the professionally competent, competitive and mobile experts, which would be able to adapt themselves to the dynamic progress of the professional environment and to improve their professionalism.*

**Keywords:** *competence approach, paradigm, discourse, competence, competency, higher education.*

The competence approach to the professional training of the experts in a higher school has recently become an object of lively discussions in the community of our country and abroad. Despite of the common increase of research activity the problem of the education's competency has passed