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THE METHODOLOGY FOR DEVELOPMENT OF ARTISTIC AND CREATIVE SYNAESTHETIC PERCEPTION OF YOUNGER SCHOOL STUDENTS ON INTEGRATED LESSONS OF MUSICAL ART

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Abstract. *The article deals with the actual methodology of artistic and creative synaesthetic perception based on the integration of color and music, fine and musical arts. The efficiency of the experimental methodology is confirmed with the results and the development of artistic and creative abilities of younger school students on integrated classes of musical art. The conclusion was made about the effect of this methodology on the development of figurative and associative thinking of school students, emotional sphere, promoting knowledge of the language and means of various types of arts, stimulation of creative self-expression of younger school students and their communication on the topic of art.*

Keywords: *methodology, synesthesia, artistic and creative synaesthetic perception, integration, integrated lesson of musical art.*

Introduction. State standard of primary general education provides one of the main tasks of the school, that is comprehensive development and education of the individual through the formation of school students' desire and ability to learn, full-fledged speech, reading, calculating skills and skills in accordance with the cognitive capabilities of primary school-aged children. The topicality of the idea of integrated learning consists in its optimality for the current stage of development of the national school, since at this stage there is a complication of the content of education, the growth of the amount of necessary information and decrease in the time allocated for its mastering. In Ukraine, the principle of integration is proclaimed to be the main principle of education reform along with the principles of humanization and democratization. One of the areas of methodological enrichment of lessons in primary classes is teaching on the basis of integration of content and forms of learning. Consideration of this issue makes it necessary to recognize the need to improve the methodological basis

with the use of modern, perspective means and techniques for individually-oriented development of artistic and creative abilities of younger school students. These techniques are classified as methods of intermodal therapy with art, which involves the use of two or more modalities of creative self-expression of the individual.

Understanding of the conceptual foundations of the integration of artistic education, understanding of the psychological characteristics of younger school students allows us to develop an actual method based on the phenomenon of synesthesia as a simultaneous sensation that involves the appearance in a person of different sensory modalities – visual, auditory, kinesthetic, which influence the creation of polymodal images, contribute to a deeper penetration into the emotional and logical figurative content of various types of art, awaken the interest of younger school students to the active communication with art.

A brief overview of related publications. The theoretical analysis of domestic and foreign literature, which describes the possibilities of artistic and creative synaesthetic perception, made it possible to conclude on the prospect of integration of music and color in improving the methods of psychological support of harmonious development of the individual, based on their natural psychophysiological potential. The researches of such scholars as R. Arnkheim, Dzh. Hibson, N. Leites have shown that aesthetic means have an intensive positive impact on the development of general and special abilities of younger school students. In parallel to this, S. Rubinstein and B. Teplov have stated the abilities of some individuals to synthesize and within this synthesis mutually transform the audio and visual images, which significantly expand the potential of creative abilities of the individual.

Studies in the field of artistic and creative synaesthetic perception were mainly directed to the consideration of already formed synthesized processes. Such processes were observed by A. Binet, investigated by A. Lazurstkyi, analyzed by S. Rubinstein and B. Teplov. In this regard, some properties of this phenomenon have been investigated and stated. Color hearing was observed in such composers as M. Rymkoho-Korsakov, O. Skriabin, S. Rakhmaninov etc.

Modern domestic and foreign scientific researches on psychophysiology by P. Anokhin, Yu. Alexandrov, B. Bezghroshovykh, T. Hrechek, V. Symonov, Yu. Mikadze, Zh. Piazhe, Dzh. Hibson, R. Arnkheim give wide opportunities and perspectives of using music and color in psychological and pedagogical development of personality. Consequently, **the goal of our research** is to integrate modern concepts of color and musical perception and to consider psychoeducational aspects, methodology of development and influence of artistic and creative synaesthetic perception on figurative and associative, intellectual, and creative abilities of younger school students.

Materials and methods. Considering the concept of “artistic and creative synaesthetic perception”, we are guided by the following definition:

“Synesthesia is a phenomenon that manifests itself in the fact that some stimulus with its effect on the corresponding sensory organ, against the will of the subject causes not only a sensation specific to this sensory organ, but also an additional sensation or imagination typical for the other sensory organ” [1, p.57]. We consider synesthesia as the interaction of leading systems of perception and aesthetic means of influence. Synaesthetic perception is associated with the transition of excitation, caused by sensation from one system modality to another: visual to auditory, kinesthetic to visual and vice versa.

Thus, signals emanating from various sensory organs are mixed, synthesized, forming new, more vivid and meaningful images. A person not only hears sounds, but also sees them and distinguishes their color. The most common type of synesthesia are visual and auditory synesthesia, when, under the influence of sound stimuli, the subject exhibits visual images, the so-called “color hearing” (photism), and sound associations, the so-called “sonorous color”, when perceiving the color (phonism). It is these specific associations that are the basis for color and musical synesthesia. This type of synesthesia is a vivid example of association by similarity, which arises from both external (sound, color) and content signs (similarity in emotional influence) and, according to professor B. Halieiev, is the main type typical for the art of associations. The presence of this ability is associated with the capability of the individual to “see” the plastic of the melody, “color” of tonality and the ability to “hear” the sound of colors [1, p. 39].

Considering the color and musical synesthesia in the context of development of cognitive as well as artistic and creative abilities of younger school students, one can distinguish the following levels of its formation, according to the concept of V. Druzhynin:

- acquisition (development of color and musical perception);
- use (regulation of emotional sphere);
- transformation and preservation of knowledge (improvement of skills, determined

by a motivationally stable position).

The optimal implementation of these levels in the development technologies of artistic and creative synaesthetic perception of younger school students is possible through the game training. In this case, we use the theory of games to simulate the most positive self-government of school students.

The stages of group training sessions based on individual psychoemotional perception and abilities of younger school students include:

- establishment of interest to the plot or image – an offer to a child of a particular psychoemotional state;
- establishment of distant, dissociating or associative positions;

- fixation of the state in different modalities (visual, auditory and kinesthetic) under the principle of self-reflection;
- creation of color and musical synthesis and exhibition of the state to the external level (creation of a picture or composition) and its verbal description;
- transformation of the state into the emotionally positive image (on the basis of the image visualized individually or given by a teacher);
- fixation of the transformed state in all modalities (visual, auditory and kinesthetic);
- new color and musical synthesis, its exhibition to the external manifestation with a verbal description;
- verbal analysis in a distance position with the fixation of new experience.

In general, the process of development of artistic and creative synaesthetic perception includes the following four main stages:

- the first stage is a constant emotional state;
- the second stage is a distinction and integration of emotional states;
- the third stage is a dynamics of emotional states;
- the fourth stage is the self-regulation of emotional states.

The first stage consists in mastering of the methods of internal concentration and means of expression of emotional state. Teacher helps to formulate the basic norms and rules in group work, interest and motives for further activities of younger school students. School students learn to observe their emotional state, express it first with words, and then in music and color. Thus, the first stage can be considered as preparatory stage, which determines the basis for further dynamic work on the development of artistic and creative synaesthetic perception of younger school students.

The purpose of the second stage consists in mastering of the methods of internal associate and distant concentration, means of expression of their own emotional states. The abilities of verbal description and external exhibition of emotional states into music and color are being developed; a certain type of analytical thinking on a “simple-to-complex” basis is being formed. This involves active interaction between a teacher and a school student. The work involves creation of story situations, the solution of which requires the ability to perceive figuratively and combine different types of artistic works. With the development of this ability, role and play situations are introduced in classes, the resolution of which, in their turn, requires the ability to plan the course of further actions. The second stage is a basic step in consolidating the experience of transferring the emotional state into music and color, as well as in verbal description of the own state.

The third stage consists in mastering of the methods and means of dynamics and transformation of the own emotional states and self-regulation. This stage involves integration of music, color and literature. Based on the artistic and

visual, and musical skills being developed during the first and second stages, real capabilities of color and musical as well as verbal integration are being created. The peculiarity of this stage consists also in the fact that the artistic and creative synaesthetic perception manifests itself as a tool for self-expression and self-regulation and is an individually specific characteristic for each school student created by his/her own experience.

The purpose of the fourth stage consists in mastering of the methods for optimal use of personal resources and the formation of installation for self-realization and self-improvement. There is a generalization, consolidation and systematization of skills and knowledge gained in the process of learning, the transfer of methods and techniques of artistic and creative synaesthetic perception into individual system of harmonious development of the personality (in various activities).

In order to study the effectiveness of the established methodology for the development of artistic and creative synaesthetic perception of younger school students, we used a set of psychodiagnostic methods. For the solution of this task, changes in the integration factors of verbal and nonverbal intellectual abilities, dynamics of the psychological state and personal qualities of younger school students in the experimental and control groups have been studied. The following blocks of methods for psychological and pedagogical diagnostics have been used.

The block of methods for diagnosing the non-verbal intellectual abilities of school students (“Learning activity” method, author L. Tsekhanska, “Gold standards” method, author O. Diachenko, “Perceptual modeling” method, author V. Kholmovska, “Making patterns” method, author R. Bardina, “Systematization” method, author N. Venher).

The block of methods for diagnosing the verbal intellectual abilities as well as special skills and knowledge of primary school-aged children (along with Yu. Hilbukh’s methods, we used WAIS test with the adapted children's version of the method consisting of 12 subtest).

The block of methods for individual’s motivation and self-esteem assessment (“The conversation about school” survey, author T. Niezhnova, “Stairs” test, author O. Torshylova.)

The block for estimating the general mental condition of younger school students included M. Liusher’s test that records indicators for six factors – FIC, factor of instability of choice, FDAN, factor of deviation from the autogenic norm, FA₁, factor of anxiety, FA₂, factor of activity, FPC, factor of performance capability, IVT, indicator of vegetative tone.

The research was conducted on the basis of the secondary school № 218 of Kyiv. The experiment involved 128 children, 61 children were in the experimental group, and 67 children were in the control group. The research of the development levels of artistic and creative synaesthetic perception of

younger school students was carried out at two diagnostic stages – summative and formative assessment

Research results. The comparison of the background (obtained at the beginning of the experiment) and the actual (obtained at the end of the experiment) indicators in the experimental and control groups allows us to state the following.

1. Regarding the methods used to evaluate non-verbal intelligence, the most significant dynamics of indicator growth was observed in the experimental group. The control group was noted in the non-verbal ability of “Systematization of thinking”, which determines the development level of elements of logical thinking (the criterion value of Student $t = 3.34$, $P < 0.01$). As a result of technology application, the intensity of perception development and visual-figurative thinking, as well as the degree of visual synthesis mastering (“Perceptual modeling”, $t = 2.89$, $P < 0.01$) are also positively changed; the dynamics of the ability development to correlate forms and objects with the given samples is increased (“Gold Standards”, $t = 2.89$, $P < 0.01$); the ability to master learning skills and the ability to subordinate their actions to the rules are developed actively (“Learning activity”, $t = 2.23$, $P < 0.05$). Thus, the dynamics analysis of development of non-verbal abilities of younger school students in the control and experimental groups has shown that, in general, in the result of the application of our methodology, the dynamics of development of non-verbal intellectual abilities in the experimental group has higher positive indicators.

2. With regard to the dynamics of the development of verbal intelligence and special skills, the statistical analysis of the research results in experimental and control groups allows us to state the intensive positive effect of our technology on the development of verbal abilities. Indicators of the Students criterion t vary from 5.72 to 9.53 at $P < 0.001$. In the system of special skills (mathematical skills and copying of syllables) t varied from 5.57 to 7.78. The greatest dynamics is determined in the development of verbal and logical thinking ($t = 9.53$ at $P < 0.001$).

3. Comparative analysis of background and factual diagnostics of indicators characterizing psychophysiological features of younger school students revealed the following consistent patterns in the ratio of indicators: the average indicator of anxiety in school students of the experimental group has been decreased significantly, which determines the impact of our technology on the correction of anxiety. The reliability of the difference in anxiety in the experimental and control groups is confirmed by the indicators $t = 3.39$ ($P < 0.01$). Significant changes were observed in the dynamics of the deviation factor from the autogenic norm ($t = 5.36$, $P < 0.001$) and the factor of vegetative tone ($t = 2.38$, $P < 0.01$), which testifies to the stabilization of tone in younger school students

of the experimental group. Positive dynamics is also stated in the factors of activity and efficiency ($t = 5,38$ and $14,48$, respectively, at $P < 0,001$).

4. Comparative study of the peculiarities of the motivational and personal-based sphere, and the self-assessment of children, which are determined before and after the experiment, states the clearer tendency to the adequate self-esteem in younger school students of the experimental group than in the children of the control group ($t = 2.03$ at $P < 0, 05$). Indicators of the motivational sphere of personality in the school students of the experimental group after the experiment were of content-based nature in 96% of the respondents, and in the children of the control group were of content-based nature only in 54% of the respondents.

Conclusions. The conducted studies allowed us to develop and experimentally substantiate the development methodology for artistic and creative synaesthetic perception of younger school students in integrated lessons of musical art. The main aspect of the methodology is the possibility of using the synthesis of musical and fine arts, music and color-light associations.

The effectiveness of the experimental methodology is confirmed by the results and dynamics of the development of artistic and creative synaesthetic perception of younger school students. It has been established that the verbal abilities and intellectual nonverbal abilities are being developed the most intensively. It has been established that the presented technology stabilizes the general psychophysiological state of the child, forms an adequate self-esteem, as well as the motivational position of the content-based learning and self-education.

The obtained results have raised new issues that require further study. Over the long term of scientific and practical researches, we consider it relevant to study further the connection of musical art with other types of art and the development of integrated technologies for musical art teaching in a general education school. The detailed analysis of the methodology may be promising when introducing individual elements and stages into the pedagogical practice of elementary school education. Interesting results should be expected from the further study of colour and sonic synesthesia and the use of its potential in the context of art and therapeutic work with younger school students.

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SUSCEPTIBILITY TO THE NEW: CONCEPT, MEANS OF DIAGNOSIS AND DEVELOPMENT

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Abstract. In the article the author defines the content of the concept, external factors and personality characteristics that have influence on the character of individual susceptibility to the new; characterizes ways of developing individual susceptibility to the new; detects means of evaluating individual susceptibility to the new. Empirical material is represented by analysis of age characteristics of individual susceptibility to the new, and by designed program of development of personal qualities of the manager on the basis of the use of a universal system of performance indicators.

Keywords: individual susceptibility to new, external factors and personality peculiarities of individual susceptibility to new, means of diagnosis and development.

Introduction. New educational paradigms: "life-long education", "development of susceptibility to innovation", "life and work in an ever-changing environment", "self-improving organizations", "knowledge management", "corporate learning" and others lead to research of the essence, possibilities of diagnostics and formation of susceptibility to new ones.