

Artistic and Figurative Thinking in the Structure of Educational Activity of Future Masters in Music Art

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Abstract: The purpose of the article is to reveal the neuropedagogical aspects of artistic and figurative thinking of future masters of music in the structure of their educational activities. The neuropedagogical approach as a scientific direction is still in its infancy and needs significant support in the educational environment. The degree of demand for continuous education of music specialists to make the right methodological decisions in their professional activities is emphasized. Artistic thinking in the system of master's degrees in music is the priority objective of the educational process at this level. However, an empirical approach to solving this particular problem occasionally complicates the search for innovative methods of musicians' artistic and figurative perception.

The specifics of neuropedagogical training for the development of artistic and figurative thinking of higher education students, which is associated with the creative interaction of teacher and student is analyzed. The regularities of training future musicians which are due to the need to solve problems for the development of creative musical and professional thinking are revealed. The importance of interdisciplinary integration of humanitarian, music-theoretical and special knowledge is emphasized, which is the basis for the formation of a high level of professionalism of future masters in music. The interaction of intellectual, auditory and emotional components in the process of development of artistic and figurative thinking of the future musician is substantiated.

Keywords: *artistic image, artistic and figurative thinking, musical art, empathy, neuropedagogy.*

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1. Introduction

Thinking is the object of many scientific disciplines: the theory of cognition, logic, psychology and neurophysiology, pedagogy, and even cybernetics. Of particular interest is the figurative and emotional thinking, which is characteristic of a certain category of people who carry out artistic and creative activities. In visual thinking there is another mental image - the image-depiction, which is a mental representation of the subject. A specific type of manifestation of fine art is emotional thinking, because a person can not be away from what he does and what confuses him. So, thinking is definitely about emotions.

However, an important indicator of professional competence of the individual is the ability of continuous self-development. This approach is carried out through continuing education - it is a modern intellectual resource of society. The environment of continuing education forms the applicant for higher education-researcher, who is fluent in the latest technologies, in the information and communication space, in innovation and research activities and so on. Such a student will always offer innovative ideas while studying in a higher education institution and later in their professional activities. Since the design of the educational environment occurs throughout a person's life, so a special mission belongs in this process to pedagogy, which helps to form a new educational space (Demchenko et al., 2021; Kosholap et al., 2021; Nerubasska & Maksymchuk, 2020; Nerubasska et al., 2020; Prots et al., 2021).

In today's conditions of diversification of the educational process remains relevant to the search for effective means and methods of organizing training. It is known that during training you need to constantly pay attention to the needs and abilities of the learner. Therefore, it is very important to study the strategy of thought processes of the student. Also, an effective educational model is focused on establishing a trusting relationship between the learner and the teacher. In such circumstances, the student is motivated by personal responsibility for the results of their activities. Educational theories and practices used in educational institutions of modern industrial societies are to some extent based on non-empirical social and behavioral sciences and on educational practices based on a culture that has an advantage (Woolcott, 2020, pp. 43-56).

This approach is aimed at developing the applicant, stimulating his activity and independence. These principles correspond to the principles of neuropedagogy - a science based on teaching and education according to the laws of the brain. This term began to be used in the late 20th century in the

United States and is now a relevant scientific and practical area of Western Europe, America and Asia. Neuropedagogy reflects the need to take into account the individual cognitive characteristics of the learner, the state of higher mental functions in the successful organization of an effective educational process (Fischer et al., 2010).

The priority of pedagogy in general is to understand how to interest, so it is necessary to bring to the fore those forms and methods of learning that allow individuals to understand that the creative process is an integral part of their lives. The main fundamental feature of human intelligence is the formation of images and their operation. Work on the formation and development of artistic and imaginative thinking intensively develops the musical intelligence of the applicant, enriches him as a person.

At different stages of ontogenesis, types of thinking coexist, as well as influence each other and complement each other. Based on the studied theoretical and psychological-pedagogical positions of the problems of figurative thinking, it is determined that the process of thinking is closely related to emotions. Musical art, in accordance with all its specific, genre-stylistic, formative features, performs a cognitive function, interacting with those who master it through certain thought processes that provide the intensity of cognition. This is manifested primarily in the acquisition of the ability to outline the purpose of their educational and cognitive activities, determine ways to implement it, plan the process of mastering a piece of music, the ability to control results and, according to control, predict the course of further musical and interpretive activities (Kovmyr, 2012).

Therefore, artistic and figurative thinking is manifested in the ability to compare, see and feel the unity of holistic phenomena. It is defined in the comprehension of artistic images by masters as a value reflection of reality.

Artistic and figurative thinking of future masters in music is a cognitive activity. It aims to comprehend artistic images in their fullness and integrity and to find analogies between images of art and the life circumstances of the individual.

2. The role of neuropedagogy in the structure of educational activities

The number of articles published under the search terms «neuroscience and education» is growing rapidly, so their number has increased sharply in recent decades and different points of view are being discussed. Find the answer to the question: what is neuropedagogy is becoming increasingly important.

The key ideas of neuropedagogy contribute to the creation of the most favorable situation for learning and development of each individual. It is important in the educational process to understand this process for the learner and for the teacher. This question concerns the use in the educational process directly of the experience of the individual, the inclusion in learning of important and significant for him, clear and thoughtful categories. Therefore, neuropedagogy proposes to include in the classroom life situations of the applicant and his interests, while all pedagogical interactions must be consistent and thoughtful. This statement is based on the laws of formation of thinking, in which visual representations and night-image thinking are the basis for the formation of verbal-logical and abstract thinking. This step-by-step path from the specific to the general provides a person not only with the logic of mastering concepts, knowledge and skills, but also based on the work of certain brain structures that obey the laws of morphogenesis and brain function.

Finding the connection between neuroscience and pedagogy is a desire of modern society and is associated with constant calls for education to be more sound. There are many ideas and research on this statement. The feasibility of applying neuroscience knowledge in the education of teachers working in the field of health care was investigated and reliable results were obtained to inform about the future development of primary pedagogical education (Ching et al., 2020). Research in the field of neuropedagogy seeks a certain interdisciplinary approach to knowledge acquisition and enhanced interaction between research in the field of neurophysiology and educational practice. But there are a number of difficulties and problems in this regard, which are related to the differences in the hierarchical model of ideas about the relationship and communication problems. Therefore, it is important to trace the specific difficulties that will further create new ideas about the interaction and development of mutual knowledge between the fields of neuroscience and education, as well as between academic theory and practice (Aronsson, 2020).

Another problem in the formation of neuropedagogy is the definition of its field, as it is related to education, psychology and neuroscience (Feiler & Stabio, 2018). According to scientists, the main and important task is to understand how knowledge about the brain can be applied in the educational process. To address this issue, semi-structured interviews were conducted with 13 teachers who repeatedly attended the Education and the Brain conference. The answers suggest that, in fact, respondents were more likely to be invited to the conference out of curiosity about how brain structures work than out of a desire to gain new teaching methods. Of those who reported that

research influenced their classroom practice, most did not distinguish between neuroscience and cognitive psychology. The answers showed that studying neuroscience can help educators maintain patience, optimism and professionalism towards their students, increase their trust in colleagues and parents and restore their sense of professional purpose. This approach suggests that current research in neurology may have real relevance to the work of teachers (Hook & Farah, 2013).

But there is an opinion that neuropedagogy has a negligible influence on educational practice. This approach is associated with the lack of specific mechanisms that combine neurology and learning. It has been found that the work of school psychologists actively combines the links between neurology and educational practice, and therefore complements the practical actions of neuropedagogy (Wilcox et al., 2021).

3. The development of artistic and figurative thinking of musicians

In the modern meaning, we call art a person's ability to think in images. The maximum activation of artistic and figurative thinking requires the creation of artistic images. In turn, in order to comprehend artistic images of art, a person must also have formed artistic and figurative thinking. Therefore, the problem of forming artistic and figurative thinking is important and requires a deep and thorough study by specialists in the art of music. New requirements for music classes provide for the development of not only special musical, but also generalized abilities of applicants. In addition, the development of such mental processes as imagination, sensation, perception, memory, thinking.

A musical image cannot be only purely musical, just as an image of painting cannot be only picturesque. The perception of the artistic image in its depth depends on the associations that play an important role. But the musical image is created not only through sensory experience, but also through facial expressions, gestures, movements and mood, and so on. A musical image cannot exist without a logic that enriches it.

Scientists distinguish several levels of formation of musical thinking. It is perceptual-cognitive which includes musical perception. Musical perception it is accepted to perceive the primary penetration by the musical phenomenon and already at the next level - associative-cognitive operations. They excite musical images through artistic ones that appeal to a person's emotional personal experience.

As Sradzhev (2019) notes that the core of musical and artistic thinking is musical thinking. The latter serves as a system of different

mechanisms of musical and auditory perception. Psychological characteristics of the structure of musical thinking include: special, musical and auditory representations that create images with the help of certain intellectual and emotional factors which, in turn, reflect specific features of one's thinking. It must be noted, however, that intellectual and emotional factors, not being separate types of thinking, activate specific features of the figurative sphere. At the same time, musicians are able to use abstract-logical thinking. This type of thinking helps to solve daily problems. Nevertheless, the main in musical thinking link is the musical-auditory image.

Indeed, musical thinking combines the intonation and logic of constructing the actual musical image and the form of the work as a whole. At the beginning of the work of the work requires logic that gives intonation the desired significance. In the further formation of musical thought there is a reflection of reality by sounds through feelings. This completes the formation of the musical image.

The structure of musical thinking can be represented in the following form (Fig. 1).

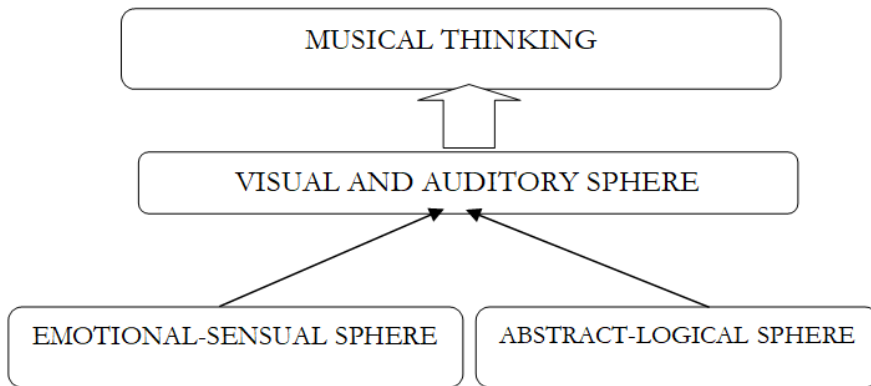


Figure 1. Block diagram of musical thinking
Source: authors' own design

Abstract-logical thinking and the emotional-sensory sphere as the most important psychological characteristics in the structure of musical thinking cannot function in the art of music independently. In musicians, they are manifested only through images of the auditory sphere. Musical-auditory representations arise as a result of work of intellect and emotions which give them individual qualities. But since it is possible to evaluate this action only through the properties of the auditory representations

themselves, the auditory sphere is in the center during music education (Ushakova, 2019).

The development of the visual and auditory sphere is a complex multifaceted activity, which covers in time not only the years of study, but also the professional activity of the composer or performer. The musician's thinking is mostly represented by auditory images. These ideas, which often reflect the same work, often leave a unique imprint of his personality and emotional sphere. These are because the mental processes that make up thinking form many different combinations that determine its properties. This reflects the creative development of the musician (Sradzhev, 2019).

4. Neuropedagogical approach to the development of artistic and figurative thinking of masters-musicians in the process of professional training

A prerequisite for providing professional training for masters in the specialty «Music» in Ukraine is the formation of their professional competence to teach in higher education. Accordingly, the training of modern teachers requires the organization of the educational process in higher education on a scientific and humanistic basis, which provides targeted systematic support of psychological and pedagogical training of scientific and pedagogical staff for higher education institutions of different levels of accreditation for their interaction with students (Fizeshi, 2020).

The analysis of modern approaches to the process of teaching a master's degree in music to suggest that the basis for the formation of a harmonious, professionally competent personality of the musician is the development of artistic thinking. The effectiveness of this complex process is due to the organization of professional training as a creative interaction between teacher and student, aimed at the formation of the student's subjectivity, mastering the experience and methods of professional activity of the musician.

The research by Kozii et al. (2020) shows that the traditional approach does not use the possibilities of the integrity of choral conducting courses and the gradual and identical organization of such training in the preparation of students.

Consequently, a significant contribution to the development of scientific and pedagogical foundations of music education has been made by outstanding musicians - performers and musicologists, as well as scientists in the psychology of artistic and musical activities. Close attention is paid to the consideration of the laws of the creative process, which is due to creative

productive thinking in various fields of human activity. A large number of scientific and pedagogical researches are connected with the development of ideas of neuropedagogy aimed at the development of creative professional thinking.

Professional training of musicians of different specialties is based on the foundation of interdisciplinary knowledge, integrating both humanitarian and music-theoretical aspects. This approach serves as an important means of developing the artistic and figurative thinking of the musician. Because the special training of a musician includes a wide range of skills and abilities. Many interesting ideas that encourage the search for new, unique methods of training, arise in the process of integrating different professional and humanities knowledge. A holistic picture of the world, created in the imagination of the learner, is impossible without a combination of different aspects of various knowledge, both in the humanities and in the actual professional activities of specialized training. Integral teaching methods, in turn, involves the synthesis of selected aspects of the content of various special music disciplines of future masters. This provides a relationship of music-theoretical knowledge and practical applied experience. Therefore, identifying aspects of interdisciplinary integration in the professional activities of a musician plays an important role in understanding the specifics of training with musicians of different specialties.

It is necessary to note the harmony and at the same time the contradiction of the interaction of intellectual and emotional, rational and sensory, conscious and intuitive in the manifestation of the phenomenon of artistic thinking in any field of artistic activity. Creative thinking is characterized by originality, novelty and a special worldview, originality of perception and an active desire to discover new properties and qualities of reality. Features of artistic and figurative thinking encourage new forms and methods of teaching, the creation of unique approaches that contribute to the improvement of the educational process as a whole and the search for new ways of creative work of the musician.

The new term «creativity» which lays the characteristic essence of a creative, creative personality, associated with the assumption that a highly intelligent person with creativity, in their actions often relies on intuition. Therefore, most researchers of the psychology of creativity, the central element of the creative process is intuitive thinking.

In the process of artistic creativity is extremely important artistic intuition, which is an important component of artistic thinking. Most artists, including musicians, as noted above, identify intuition and talent, considering intuition as one of the main components of natural talent.

Comprehension of musical material, mastering the musical language involves the development of a special kind of thinking of the musician, which reveals the interaction of discursive and intuitive components of thinking.

Therefore, revealing the process of professional training of future masters of music in terms of the focus of this process on the creative formation of personality, we consider it extremely important to study the mechanisms of interaction of intuitive and discursive components of artistic thinking, which is a special mechanism for harmonizing creative process. personal and professional development of a musician.

It should be noted that artistic thinking and intuition play a special role in the integration of knowledge, skills and abilities in the process of professional training in courses of various disciplines of general and professional cycles.

Professional thinking has a multilevel structure and is associated with the gradual formation of its various components in the process of teaching future masters in music. In the structure of professional thinking can be considered an invariant component, which is based on philosophical, aesthetic, cultural, psychological and pedagogical content. Neuropedagogical training of musicians of various profiles is based on fundamental scientific and music-theoretical training. The specific component is connected with a profile of a specialty of the musician-teacher and causes formation of musical, art and figurative thinking in the course of educational activity in courses of special disciplines.

Great importance plays the teacher's ability to emotionally ignite the student, to capture the state necessary for the creation of this piece of music in order to convey the diversity of musical drama. If the teacher succeeds, he can hope that his graduate will also emotionally and deeply convey their musical feelings not only when performing a particular work, but will be able to further realize their creative intentions in future performance.

Independence, originality of thinking, readiness to solve difficult problems, using innovative ideas and creatively mastering new ways and means of professional activity also play the important role. The ability to convey musical content in the process of revealing the musical form by adequate means of performance is the purpose of work on each work. One of the key points in understanding the essence of musical material is the ability to find the logic of musical development.

In the development of artistic and figurative thinking is of great importance to understand the general intonation turns, the so-called intonation formulas that convey certain semantic information and are found

in works of different styles and genres. Therefore, it is necessary to master the semantic analysis of musical material. The logical, analytical component of thinking in the process of studying the musical content of the work and semantic analysis interacts with intuitive thinking, which is the ability to synthesize and creates the conditions for extrapolation of knowledge into new musical structures.

5. Conclusions

Thus, the development of artistic and musical thinking is a long, laborious process and classes in special conditions become a necessary practical basis for the development of independence and creative activity of the student. This development is associated with a harmonious combination of emotions, feelings and awareness of the execution process.

Understanding the stylistic patterns of works, understanding the integrity of the musical image - these are the main areas of work that determine the achievement of effectiveness in the development of creative thinking of future masters in music.

The factor that contributes to the implementation of these tasks is the personal activity of the student, awareness of the importance of learning the experience of creative professional activity. Also the most important is the ability to see the problem and find a way to independently solve artistic and creative problems.

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