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# WAYS TO SHAPE THE COGNITIVE ENGAGEMENT OF MUSIC **EDUCATION STUDENTS**

Abstract: This article analyses interactive teaching methods that have an effective impact on the formation of cognitive activity of music education students. The paper substantiates the idea that in the process of training specialists with music education the principle of holistic and harmonious intellectual-emotional, emotional-volitional and effective-practical formation of personality in the process of learning musical literacy should be taken into account. To identify the results of learning, upbringing, spiritual development of music education students article offers four groups of tasks aimed at: "students' awareness of the musical picture of the world", to identify the motivational, emotional and emotional needs sphere of the students, "awareness of spiritual and moral qualities". The experimental work allowed us to come to reasonable conclusions that interactive teaching methods used in the learning process contribute to the creative understanding of music and the formation of cognitive activity of music education students.

Key words: interactive methods, music, motivational, emotional need sphere, musical worldview, logical thinking, creative thinking, cognitive activity.

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#### Introduction

The radical changes in the socio-economic, political, spiritual and moral spheres of society in recent years have placed new demands on a person's personal qualities and values. In the current context of implementation of the strategic goals and tasks of socio-economic development of the Republic of Kazakhstan, increasingly strengthening its state independence, growth of international prestige, strengthening of integration processes into the world economy and culture, education of a multicultural personality is the most important component of the development of Kazakh society.

The education of a creative personality also directly affects the socially important aspect of shaping the culture of professional activity of a specialist. The social progress of our society largely depends on the level of creative potential of the individual specialist. Therefore, it becomes crucial to amass all the valuable experience accumulated in the field of music education to introduce into the teaching process methods that lead to the improvement of students' learning and upbringing.

The requirements for the personality of the future music teacher and the functions he or she has to fulfil in the process of professional activity are



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|                       | JIF                    | = 1.500          | <b>SJIF</b> (Morocco) = $7$ .      | .184 | OAJI (USA)   | = 0.350 |

currently changing. The modern school needs a teacher who is capable of carrying out creative activities, who has an innovative style, a desire for self-realisation, which in itself is not possible without intensifying the cognitive activity of music students.

## Main part.

In our opinion, during the preparation of the future music teacher it is necessary to put the following purposes: formation in the future teachers of music a world outlook orientation in knowledge of "the musical and semantic picture of the world", cognitive abilities to analyze, compare, generalize and estimate musical phenomena; education of spiritual and moral feelings, expansion of "field" of aesthetic emotions, "borders" of the spiritual world of the forming personality of students. At this stage too, the principle of holistic and harmonious intellectualemotional, emotional-volitional and active-practical formation of personality in the process of training and education implied the simultaneous development of all essential forces and potentialities of students, taking into account an individual and differentiated approach. At this stage, we applied a subgroup of teaching methods according to the logic of thinking: inductive teaching methods (the logic of revealing the content of the studied material from the particular to the general) and deductive teaching methods (the logic of revealing the content of the studied topic from the general to the particular) combined with a subgroup of teaching methods according to the degree of independence and activity of cognitive activity of students - reproductive and problem-searching teaching methods.

It is important for the teacher's system of work to stimulate the cognitive activity of students in learning to bear in mind that there are three levels of thinking activity: the level of understanding, the level of logical thinking and the level of creative thinking.

The system of cognitive stimulation should include, first and foremost, a system of techniques to guide the students' thinking activity as they perceive the material presented by the teacher. It is also important to have a clear idea of which teaching techniques ensure the deepest understanding and contribute to the comprehensive development of learners' thinking. Obviously, the choice of explanatory techniques is determined by the developmental level of the learners and the nature of the material being presented.

The next stage is logical thinking. At this level of cognitive activity, students should be able to independently analyse the objects being studied, compare their properties, compare the results of individual experiments, draw generalised conclusions, make classifications, prove, explain, etc. The teacher, therefore, when organising the students' thinking activity at this level, should select tasks that involve the performance of one or a combination of the abovementioned mental activities. The more independent actions the students have to take when completing the task, the more difficult it is.

Creative thinking. According to modern thinking, the process of scientific creativity takes place in three stages.

Stage I is characterised by the emergence (in the course of cognition or practical activity) of a problematic situation, an initial analysis of it and the formulation of the problem.

Stage II of the creative process is about finding a way to solve a problem. This search is done through a detailed analysis of the problem based on existing knowledge. If necessary, knowledge of the object of study can be supplemented by studying the relevant literature or by carrying out the necessary experimental studies.

Stage III of creative cognition - a contradiction is found (or guessed), a principle for solving the problem is found and tested. At this stage, the solution principle is realised in the form of individual creative outputs: solving a new problem, justifications and developing theories, etc.

The considered structure of creative activity allows us to highlight the essential features of creative thinking. Creative thinking is characterised not only by the development of logical thinking, the vastness of knowledge, but also by flexibility, critical thinking, rapid updating of the necessary knowledge, the ability to make intuitive judgements and to solve problems under conditions of complete determinism.

In the learning process, it is advisable to classify as creative all those tasks for which the principle is not specified and often not explicitly known to the learners.

It should be formulated by them themselves, in the course of analysing the task, on the basis of their existing knowledge and experience in solving nonstandard tasks.

The three conditions for thinking activity can form the basis of the teacher's system of work to stimulate students' cognitive activity.

The starting point for this work should be to ensure that learners have a thorough understanding of the learning material presented by the teacher or in a book (Level I). It is only through systematic work that ensures students' deep understanding of the material that various techniques and tasks can be applied that require students to independently solve the cognitive tasks of the lesson at levels II and III (i.e. on the basis of logical or creative thinking). Our work can only be successful if we make adequate and rich use of interactive teaching methods. According to K.B. Kholikov. "In higher education institutions, interactive forms and methods of teaching should occupy between 40 and 60 per cent of classes".[1,57]

By working with a first year student on the spiritual and moral problems of the 'musical and semantic picture of the world' by comparing eras,



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styles and identifying their 'essential attributes', we taught the student to grasp the lessons of spirituality in a personal, active way rather than by the verbal example of the teacher. The pedagogical prerequisite for us was a trusting, participatory resolution of issues and problems without the teacher's dominant authority or the desire to impose his or her creative solution on the student. It should also be emphasised that music has a powerful educational impact. As Rakhimov R.N. pointed out, "Making music with others helps build a culture of tolerance and acceptance".[2, 57].

We developed the capacity for inner observation, introspection, by entering into a dialogue with the teacher: "How did you find this?", "What do you hear in this music - what mood does it evoke in you?" etc.

The meaning of aesthetic emotions lies in an artistic awareness of the ordinary, a profound reflection on life. The need to enrich one's personality with such emotions is satisfied by music.

psychology, Aesthetics and stating the relationship between feelings and needs, define the leading role of aesthetic feelings in the formation of needs. It is known that classical music - the works of Johann Sebastian Bach, Wolfgang Amadeus Mozart, Franz Beethoven, Franz Chopin, Pyotr Tchaikovsky and others - has a psychological and lasting emotional impact on the human soul. Listening to several purposefully selected pieces of classical music with a pronounced "homogeneous" emotional state, helped the students to anchor this emotion in the emotional memory of the "soul". As Saidi S. observed. "Music, perhaps more than any other art, can affect and create mood".[3, 217]

Through examples of the lives and works of great composers, students learned that experiencing negative emotions is just as necessary because, in the words of the great pianist Vladimir Sofronitsky, "Without grief, there would be no such vivid sense of happiness". The students were beginning to realise that the happiness of an artist-composer or an artist-is composed not only of the joys but also of the torments of creation.

Studying a piece of music, students and I tried to understand what "semantic" unit it represents both in the composer's work and what "specific weight" and semantic load it carries in the "musically semantic picture of the world", because when a student performs, for example, a Beethoven sonata, one can feel whether he knows only this one sonata or knows all 32 Beethoven sonatas", so "quantity transforms into quality". Therefore, along with the thematic principle of studying music by identifying similarities in musical phenomena, we used the historical principle of studying heritage by era (Renaissance, Enlightenment, etc.) and movement (classicism, romanticism, symbolism, realism). This principle contributed to an understanding of the historical regularities of the spiritual development of mankind. Such excursions "into the depths of centuries"

developed the inner spiritual world of students subtlety of emotional states, aesthetic emotions, moral thoughts and feelings.

Thus, the study of the "genealogical tree" of the "musical and semantic picture of the world" helped the students not only to feel the "unique flavour" of the composer's music, to generalise about the vital and semantic priorities of his era, but also to link these "milestones, knots" into a coherent view of a single planetary civilisation. For example, the music of the "titans of thought" - Johann Sebastian Bach and George Handel was perceived by the students as a "majestic monument of musical architecture" of the Baroque style; Mozart - as the "sun" of reason, beauty, eternal harmony of the "classicism" era; the unique spiritual world of the great romanticists - Schubert, Liszt, Chopin... revealed not only the spiritual loneliness of the genius, but the spiritual connection of the times. In reflecting on the "milestones" of the "musical sense picture of the world", the students and I were struck by the idea of how genius feels about genius. Each is unique, each is a pinnacle in its own right, and such a 'union' in the overall 'musical and semantic picture of the world': how everything in the world is interconnected and continues each other.

Understanding deep ideas, thoughts and feelings also required an effort of will on the part of the students. Through the great examples of Mozart, Tchaikovsky and Scriabin, the students realised that "art is a burden on the shoulders" and that inspiration is born only from work and in the course of work. Thus, together with the students, we generalised that music not only "codifies" the atmosphere, spirit and events of a particular historical era and humanity, but also influences the spiritual world of posterity.

In this way, we have set ourselves the task of creating an attitude of self-education, broadening the scope of knowledge and organising forms of work that require students to independently seek knowledge and stimulate interest. This is the kind of creative competition-game "Who knows more, who knows little known and unusual facts about the biographies of composers, performers, amazing facts of history". We agree with A.K. Asimov, who states that "the development of creative abilities is realised through thought activity ... and the development of these abilities should begin at an early age".[4, 27].

The analysis of the research results convincingly showed that the problem-research approach in teaching encouraged students to search for new options for creative solutions of music interpretation, awakening cognitive activity, thinking processes, brightness of worldview, imagination, which consolidated the knowledge - awareness of the "musical and semantic picture of the world".

We traced students' mental development, ways of thinking formed by learning and cognitive activity, development of their motivational, emotional and need-based sphere - we proceeded from the target,



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content aspects and didactic means of lessons: how the object and subject of learning and cognitive activity of students are reflected in the content of lessons, what ways of organizing students' activity, what methods are used to develop cognitive activity of personality, what psychological impact the lesson had on the students. The systematic organization of logical and emotional "components" into coherent, artistic images of the work created the conditions for the perception of the moods, feelings, experiences and thoughts of the author.

Emotional storytelling by the teacher, recreating the composer as a musician and a human being, can arouse emotions and arouse a desire to learn more about the composer and his music.

Such a verbal method as storytelling, conversation - reflection should be supported by an indispensable teaching tool - visualization - the teacher's own performance on the instrument, in which everything - facial expressions, finger and hand movements reveal the meaning of music.

In this case, the activation of cognitive activity is not determined by the method of conversation itself, but by the nature of the questions asked. The conversation activates cognitive activity if the questions are designed for the students' thinking, their analytical-synthetic activity, if they are aimed at reaching an inductive or deductive conclusion. Call it a heuristic because it leads learners to new knowledge.

When introducing new material inductively, the teacher poses questions so that the students can independently identify the common features of the observed objects and come to a generalisation during the analysis. In the deductive inference of new knowledge or the theoretical explanation of an experimentally established fact, the teacher, having outlined the essential features of the model in question, involves the students in a mental experiment and asks them to predict the changes that will be observed during the experiment. The development of students' thinking during a heuristic discussion depends on the teacher's skill at asking questions.

In testing the experimental work, we tried to base the learning process on meaningful questions, conversations and reflections between the teacher and the student at the musical instrument, which facilitated the development of attitudes, judgments and beliefs. This method of teaching is, in our view, akin to the "sharpening" of beliefs, the comprehension of wisdom in nature talks by the philosophers of antiquity.

The student's exposure to different 'points of view' and the teacher's own position, offered to the student not as dogma but as a convincing opinion and defence of their positions, honed the student's 'polyphonic' view of music performance.

Therefore, such experimental creative games as "I am a composer-Kyushi", "I am a modern performer", etc., aimed at revealing the essence of a musical work, composing a comparative series of musical and historical eras, styles, served as a means of theoretical thinking, creative attitude to the acquired knowledge, development of imageemotional "field" of aesthetic emotions.Flexible forms of individualisation and differentiation allowed for the development of active and independent learners through ways of learning.Observation of each student helped to record their cognitive selectivity and mental development.

Thus, we conducted an experiment in order to identify a pattern of more active spiritual comprehension and deeper understanding of classical musical works.

Verification of the experimental work confirmed our assumption that active and interactive creative teaching methods, aimed at knowledge of musical art, contributed to the education of aesthetic taste, spiritual and moral feelings and personal qualities of students, the development of such cognitive mental processes as attention, imagination, memory, creative thinking, general musical development of students.

To summarise the results of the experimental work, we conducted four groups of learning tasks to identify the results of the students' learning, nurturing spiritual development and spiritual-value orientations. The first group of tasks included a questionnaire on knowledge - awareness of the "musical and semantic picture of the world" by era, direction, style and genre of music. The second group of tasks was aimed at the motivational, emotional identifying and demanding sphere of the learners, the "world of feelings and emotions". The third group of tasks identified the students' active attitude to learning and their level of cognitive activity. The fourth group of assignments was aimed at awareness of the spiritual and moral qualities of musical images and the creative understanding of music (compositions, essays, illustrations, musical competitions, quizzes, concert discussions). This group of tasks took into account learners' self-actualisation and their interaction with the educational sphere. These four groups of tasks were aimed at identifying all four components of students' cognitive activity that we had identified and determining the pedagogical results of the experimental work. The assessment criteria were the depth, content, originality of thinking, qualitative composition of the accumulated emotional, aesthetic and spiritual-ethical "thesaurus" of the students' personality, its self-reflexivity and self-actualisation. The students were also presented with questions of personality and outlook: what is a personality, can a person be a personality without striving to help another person, can a person be kind but not a personality, can a person be good-looking but not beautiful?

The creative assignments involved knowledge the pupil's awareness of the musical composition in the context of a historical era, its relationship to other



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art forms, not only of that era, but also in the context of philosophical generalisations.

As a result, data characterising the degree of manifestation of the components of cognitive activity of music education students were obtained.

The results of the experimental work have led to the following conclusions.

A comparative analysis of the quality of musical and aesthetic knowledge, musical and technological cognitive abilities and skills and the general level of learning, education and development of students conducted in the control and experimental groups revealed that the index of "creative" attitude to lessons in the experimental group was higher than in the control group.

The students in the control group had selective knowledge - awareness of the "musical and semantic picture of the world", its emotional and active, creative comprehension.

Although students in both groups participated in collective forms of music-making and competitions, the implementation of spiritual and moral development using more traditional, reproductive methods, the study of highly specialized musical concepts, work on the play apparatus and the lack of psychological and pedagogical work on the holistic perception of the "musical and semantic world picture", gave lower results of professional development of students in the control group. At the same time, as a result of targeted work using innovative technologies, the students in the experimental group showed progressive dynamics of personal professional development.

The results of our experimental work should be seen not only in its external manifestations: knowledge, skills, abilities of the students, but more in the professional results of music education and training - the development of emotional world, views, judgments, validity of assessments and beliefs, the desire for active knowledge of the world through music.

## Conclusion.

Thus, the experience of introducing the results of the study into practice shows the effectiveness of the developed model for enhancing the cognitive activity of music education students.

1. the experimental work confirmed our assumption that music training and education, built on the principle of a systematic approach to the formation of cognitive activity of music students by mastering knowledge - awareness of the "musical and semantic picture of the world", the development of cognitive, motivational, emotional and volitional sphere, creative abilities and positive spiritual and moral qualities of students contribute to a better and more productive solution of this problem.

2. Professional-competent pedagogical interaction of teachers with students, expressed in the ability to find and reveal the gift of the student, systemic, personal-activity, individual-differentiated and problem-research approaches, as well as creative methods of active and developing, nurturing learning, were the optimal, leading conditions for the development of essential forces, sphere of behavioural reactions, spiritual growth of students' personality.

3. A considerable amount and quality of the systematic musical knowledge, skills and abilities acquired gives the students an awareness of the "musical and semantic picture of the world". The experiment proved that specially organised classes, the content and methods of which are built on the basis of content generalisation, knowledge from the general to the specific and from the specific to the general, the use of active and interactive teaching methods can significantly affect the formation of cognitive activity of students in all components.

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