

The Necessity of Activating Students' Educational and Cognitive Activity in Music Education

Rakhimov Zokir Toshtemirovich

Professor at the Yunus Rajabiy Institute of Uzbek National Musical Art, Doctor of Pedagogical Sciences, Uzbekistan

Received: 28 August 2026 **Accepted:** 24 September 2026 **Published:** 14 October 2026

ABSTRACT

This article theoretically analyzes the pedagogical, psychological and didactic foundations of the activation of educational and cognitive activities of students studying in the direction of music education in higher educational institutions. The specifics of music education, including auditory perception, musical thinking, artistic-aesthetic perception, performance skills, creative search, and the interrelationship of reflexive abilities, are substantiated. The need for the formation of a student in the educational process is highlighted not only as a subject receiving knowledge, but also as an independent thinker, an analyst of musical phenomena, a developer of artistic solutions and an active participant managing his educational trajectory.

Keywords: Music education, learning and cognitive activity, cognitive engagement, musical thinking, creative independence, reflection, collaborative learning, digital technologies.

INTRODUCTION

In the modern higher education system, the issue of enhancing the quality of education extends beyond merely imparting a specific volume of theoretical knowledge to students. This task holds particular significance in music education, as the process of mastering musical knowledge involves more than just acquiring concepts, rules, music theory, and historical facts. Simultaneously, the student distinguishes sounds, comprehends rhythmic and melodic relationships, perceives the artistic content of a composition, interprets musical imagery, seeks performance solutions, and evaluates the outcomes of their work. Thus, the cognitive process in music education constitutes a complex integration of intellectual, emotional, sensorimotor, and creative activities. From this perspective, stimulating active learning and cognitive engagement is considered a priority pedagogical objective in higher education.

Research focused on student engagement in music education emphasizes that being involved in the

educational process cannot be equated simply with attending a class or completing an assignment. A student's intellectual effort, emotional response, readiness for collaboration, and capacity to influence the educational process are also of significant importance [5]. It follows that fostering active engagement in music education requires developing not only the student's outward participation but also their intrinsic need for knowledge, musical thinking, and ability to make independent decisions.

The relevance of this topic is further underscored by a crucial consideration: while it is necessary for a music teacher to demonstrate performance techniques, interpret works, correct technical errors, and impart established knowledge, relying exclusively on these methods can limit the student's capacity for independent learning. If a student derives all conclusions regarding a musical work's content, form, style, and expressive means solely from the teacher, they may be able to reproduce a pre-existing interpretation but likely struggle to independently analyze a new musical

situation.

Therefore, it is essential to strike an optimal balance between pedagogical guidance and student independence in music education. The teacher should not act merely as the sole source of knowledge but rather as a pedagogical partner who stimulates the student's musical thinking, creates problem-solving scenarios, guides creative exploration, and facilitates self-assessment. UNESCO's 2025 practical recommendations on culture and arts education emphasize the significance of arts education in fostering creativity, critical thinking, an appreciation of cultural diversity, and an inclusive educational environment [3]. This approach highlights the need to view music education not merely as performance training in a narrow sense, but as a holistic pedagogical process that supports an individual's intellectual, aesthetic, and social development.

METHODS

Today, the effectiveness of the educational process is determined primarily by the student's ability to independently master knowledge, apply it in new situations, analyze problems, draw evidence-based conclusions, and continuously improve their professional practice. The methodological foundation of this issue comprises learner-centered education, an activity-based approach, constructivist educational concepts, and principles of social collaboration and reflective teaching. Within this framework, the student is viewed not merely as a subject who mechanically absorbs educational content, but as an active participant in the process of comprehending knowledge, linking it to experience, drawing independent conclusions, and constructing new meaning [9].

The following theoretical methods were employed in this context:

First, the method of analyzing scientific literature was used to examine the theoretical foundations of active participation, independent study, and collaborative knowledge acquisition in music education. Research in this area allows for the interpretation of student engagement in the educational process as a multidimensional phenomenon [5].

Second, a comparative-analytical method was used to identify the distinctions between traditional—primarily

reproductive—teaching and pedagogical approaches focused on student engagement. In this context, the role of teacher guidance, the opportunity for independent decision-making, the proportion of creative tasks, and the methods for assessing educational outcomes were considered as theoretical criteria [8].

Thirdly, based on the method of content synthesis, the possibilities of integrating music listening, performance, theoretical analysis, collective creativity, and reflection into a unified educational-cognitive system were summarized [4].

Fourthly, based on a systems approach, musical knowledge, performance skills, emotional perception, creative thinking, and independent learning were examined as interacting components.

RESULTS

Learning-cognitive activity is a purposeful process in which the learner consciously acquires knowledge, skills, and competencies; processes existing knowledge; connects new information with prior experience; solves problems independently; and evaluates their own learning outcomes. This activity extends beyond merely completing a learning task; it encompasses grasping the cognitive objective, formulating an action plan, verifying results, and—when necessary—adjusting methods of activity [6-7].

In the context of music education, the content of learning-cognitive activity becomes more complex. This is because the process of acquiring musical knowledge simultaneously engages the student's auditory perception, memory, attention, sense of rhythm, musical imagination, emotional response, and performance actions. For instance, when listening to a musical piece, the student does not merely receive sounds; they strive to comprehend the work's internal structure, perceive changes in tempo and dynamics, identify relationships between musical themes, and interpret the artistic content.

Thus, cognitive activity in music education manifests at least at four interconnected levels. The first level is the perception and comprehension of musical information. The second level involves comparing and analyzing musical material and linking it to theoretical concepts. The third level entails independently solving musical problems and making decisions regarding performance or interpretation. The fourth level involves the reflective

evaluation of one's results and the refinement of future activities.

These levels do not operate in isolation but function as a process that is both sequential and cyclical. When analyzing a performance error, a student revisits their theoretical knowledge; when listening to a new piece, they draw upon prior musical experience; and when undertaking a creative task, they reorganize the knowledge they have acquired.

From this perspective, the primary criterion for activating the learning process in music education is not the amount of information a student remembers, but rather the intellectual operations they can perform with musical knowledge, how they interpret it, and the extent to which they can apply it independently in new situations.

The need to activate the learning process is determined, first and foremost, by the professional objectives of music education. Students specializing in music will eventually work not merely as performers or music teachers, but as professionals capable of interpreting artistic content, cultivating aesthetic taste in their students, analyzing musical works, and organizing creative activities. Merely mastering existing knowledge is insufficient for fulfilling such professional roles.

First, there is a need to develop independent musical thinking. If a student cannot independently analyze a work's genre, form, style, expressive means, and artistic concept, their professional practice will largely depend on external instructions. Independent analysis, however, enables one to grasp the internal logic of the musical material, develop an interpretation based on evidence, and substantiate performance decisions.

Second, there is a need for the conscious development of performance skills. Musical performance is not simply a matter of repeating movements; it is a process involving purposeful practice, identifying the causes of errors, breaking down technical challenges, and comparing results. Students must learn to listen to and evaluate their own performances, explain why rhythmic instability or intonation errors occur in specific passages, and independently adjust their practice strategies. Thirdly, there is a need to foster creative independence. The art of music is not limited to merely reproducing content in a fixed form; it encompasses a wide range of interpretations, expressions, compositions, improvisations, and artistic

choices. Therefore, it is crucial to provide students with opportunities during the educational process to rework musical material, create arrangements, compose short pieces, and compare various creative solutions.

Fourthly, there is a need for professional self-development. In music pedagogy, a learner's ability to study independently is vital not only during their university years but throughout their entire professional career. Mastering new repertoire, learning modern teaching methods, utilizing digital resources, and adapting to the individual needs of students require a commitment to continuous exploration and growth.

Fifth, it is necessary to take into account individual differences in education. Students vary in their musical experience, auditory perception, theoretical background, performance skills, learning pace, and interests. A systematic review focused on supporting students with special educational needs in music classes highlights the importance of tailored pedagogical support and an inclusive approach within the educational process [1]. Although that study primarily focused on general school students aged 6–15, the principle of providing pedagogical support adapted to individual needs holds theoretical significance for the training of music educators as well.

Thus, stimulating learning and cognitive activity in music education is not merely a method for making lessons engaging; it is a strategic pedagogical task that fosters the student's professional independence, musical thinking, creative potential, and capacity for continuous development.

Research on inclusivity in music education also underscores the importance of adapting pedagogical support to meet students' specific needs [1]. This implies that when implementing active teaching methods, it is inappropriate to demand the same pace, level of performance, or mode of expression from all students. Analyzing a musical score may be more effective for some students, while audiovisual examples might work better for others, and step-by-step practical exercises for yet others.

UNESCO's 2025 recommendations link culture and arts education with creativity, critical thinking, and an appreciation of cultural diversity [3]. This approach provides a theoretical basis for the necessity of integrating national musical heritage, world music, contemporary performance practices, and students' personal artistic

experiences within music education.

Thus, contemporary scholarly sources substantiate the importance of active teaching in music education. However, to ensure its effectiveness, this active engagement must be structured not merely around outward actions or classroom intensity, but around comprehension, independent thinking, the development of creative solutions, and the evaluation of one's own work.

DISCUSSION

This indicates the necessity of organizing the activation of students' learning and cognitive activities in music education not merely through isolated methods, but as a pedagogical system encompassing all components of the educational process. In such a system, educational objectives, the content of musical material, teaching methods, independent study, pedagogical interaction, and assessment mechanisms are mutually coordinated.

The first stage is goal-oriented and motivational; it focuses on the student's need to acquire musical knowledge, their professional goals, and their understanding of the significance of the learning task. At this stage, the connection between the work being studied—or the musical phenomenon or performance task—and professional practice is explained to the student.

The second stage involves problem-based cognitive activity. Here, students acquire new knowledge by observing, listening to, comparing, and analyzing musical material, as well as by seeking answers to challenging questions. Throughout this process, the teacher employs questions, supplementary materials, and guiding instructions to stimulate the student's independent thinking. The third stage involves practical-creative activity, where theoretical knowledge finds practical expression through performance, improvisation, musical analysis, arranging, ensemble playing, and project-based tasks. Students do not merely repeat what they have learned; they apply that knowledge in new contexts and devise independent solutions.

The fourth stage consists of reflective-evaluative activity. Students analyze the completed task based on established criteria, identify their strengths and areas requiring improvement, and set goals for the next session.

The fifth stage encompasses consolidating results and

transitioning to new learning tasks. Here, the outcomes of previous activities serve as a foundation for mastering new musical material. Thus, the educational process transforms into a developmental cycle that repeats itself yet grows increasingly complex at each stage.

The proposed theoretical approach for stimulating learning activity can be applied across various music education disciplines [10]. For instance, in music theory classes, students can be tasked with independently identifying musical principles through examples, alongside mastering established rules. In music history courses, the focus is placed on comparing musical works within their historical, social, and stylistic contexts. Meanwhile, in primary instrumental or vocal training, it is crucial for students to analyze their own performances, select practice strategies, and compare different interpretative approaches.

This approach offers even broader possibilities within music pedagogy courses. Students can engage in practical tasks such as designing future lessons, developing assignments for learners of various ages, identifying students' musical needs, and evaluating educational outcomes. In this context, the student's own experience of active learning serves as a methodological foundation for their future pedagogical practice.

Furthermore, fostering student engagement in the study of national musical heritage is of particular importance. The comparative analysis of folk songs, *maqom* examples, traditional performance styles, and contemporary musical works not only cultivates a national artistic mindset among students but also strengthens their ability to independently comprehend musical phenomena. In this process, it is essential to present cultural heritage not merely as a collection of information to be memorized, but as a source for analysis, interpretation, and creative dialogue. Thus, the proposed theoretical approach can serve as a conceptual basis for the purposeful organization of educational and cognitive activity in music education, the coordination of its components, and the multi-criteria assessment of its outcomes.

CONCLUSION

Activating students' learning and cognitive activities in music education is a key pedagogical task of modern higher education. This necessity is driven by the complex nature of musical knowledge, the interplay between performance and theoretical thinking, the requirement for

creative independence, and the continuous professional development of future specialists.

Based on the points raised above, the following conclusions can be drawn.

First, learning and cognitive activity cannot be equated merely with a student's outward participation in a class. It encompasses a set of interconnected processes, such as comprehending musical content, conducting independent analysis, applying knowledge practically, devising creative solutions, and evaluating one's own results.

Second, fostering cognitive engagement in music education relies on the harmonious integration of motivational, cognitive, emotional-aesthetic, practical-performative, creative, and reflective components. Developing these components in isolation can limit educational outcomes. Therefore, it is essential to coordinate theoretical knowledge, practical experience, artistic perception, and independent thinking within the pedagogical process. Thirdly, the teacher's pedagogical role should extend beyond merely conveying established knowledge to encompass that of a partner who supports the student's independent inquiry, creates problem-based situations, and fosters reflective practice. In this context, pedagogical guidance and student independence are not contradictory; rather, they are complementary factors that ensure the purposeful organization of education.

Fourthly, when assessing students' learning and cognitive activities, it is essential to focus not only on final outcomes but also on criteria such as motivation, musical thinking, performance skills, creative independence, collaboration, and reflection. This approach enables a broader understanding of changes within the educational process and supports the individual development of students.

Overall, the activation of students' learning and cognitive activities in music education should be organized as a holistic process that encompasses educational content, pedagogical relationships, independent study, and assessment mechanisms. Such an approach can facilitate the conscious acquisition of musical knowledge, the development of creative thinking, and the cultivation of the intellectual and pedagogical potential necessary for the future independent professional practice of specialists.

REFERENCES

1. Mommo, O., Sutela, K., Mononen, R. (2025). Inclusion and pedagogical support for students with special educational needs in music lessons: A systematic review. *International Journal of Music Education*, 47(3). <https://doi.org/10.1177/1321103X251342143>
2. Stenalt, M. H., Lassesen, B. (2022). Does student agency benefit student learning? A systematic review of higher education research. *Assessment & Evaluation in Higher Education*, 47(5), 653–669. <https://doi.org/10.1080/02602938.2021.1967874>
3. UNESCO. (2025). UNESCO Framework for Culture and Arts Education: Implementation Guidance. Paris: UNESCO. <https://www.unesco.org/en/articles/implementation-guidance-unesco-framework-culture-and-arts-education>
4. Veniel-Martí, F., Botella-Nicolás, A. M., Pruitt, N., Pigott, T., et al. (2026). Active Learning in Music Education: A Systematic Review and Meta-Analysis. Update: Applications of Research in Music Education. OnlineFirst. <https://doi.org/10.1177/87551233261425936>
5. Wang, A. (2021). Models of Student Engagement in Music Education Classroom in Higher Education. *Frontiers in Psychology*, 12, Article 738207. <https://doi.org/10.3389/fpsyg.2021.738207>
6. Raximov Z.T., Jumayeva G.X. Boshlang'ich sinf o'quvchilarida o'quv motivlarini shakllantirishning pedagogik imkoniyatlari // "Maktabgacha va maktab ta'limi" jurnali (Pedagogika, psixologiya fanlariga ixtisoslashgan ilmiy jurnal) 2026-yil, may, 5(4)-son 178-182-b.
7. Raximov Z.T. Kompetensiyaviy yondashuv asosida boshlang'ich sinf o'quvchilarining o'quvbilish faoliyatini rivojlantirish // "Maktabgacha va maktab ta'limi" jurnali (Pedagogika, psixologiya fanlariga ixtisoslashgan ilmiy jurnal) 2026-yil, may, 5(4)-son 245-248-b.
8. Rakhimov Z.T. Modern approaches to preparing students for innovative pedagogical activities // *Galaxy International Interdisciplinary Research Journal (GIIRJ)* ISSN (E): 2347-6915 Vol. 14, Issue 4

April (2026). P. 99-104

9. Rakhimov Z.T. Possibilities of using pedagogical technologies in a digital educational environment // Journal of Pedagogical Inventions and Practices // Peer Reviewed International Journal ISSN NO: 2770-2367 <https://zienjournals.com> May 2026. Volume 56. P.16-21
10. Rakhimov Z.T., Bozorova M.Ch. Didactic Conditions For The Development Of Creative Abilities Of Future Primary School Teachers // Journal of Pedagogical Inventions and Practices // Peer Reviewed International Journal ISSN NO: 2770-2367 <https://zienjournals.com> May 2026. Volume 56. P. 12-16