

A PROGRAM MODEL AIMED AT ENHANCING THE MUSICAL LITERACY OF THIRD-GRADE PUPILS

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Abstract: *This article presents a modern pedagogical model of musical literacy suitable for pupils in primary school. The model is based on historical experience with notation systems and literacy methods used in music practice and education, combined with the usage of digital tools during lessons. The innovation introduced expands the level of music-theoretical culture of the children and enriches the aesthetic space with which kids can interact. The innovative model for music literacy mentioned here is the subject of an original work. It has been adapted and approved specifically for the needs and interests of third-grade pupils in general education. It complies with the music school curriculum defined by the Ministry of Education. It is suitable for use by students of music, pre-school, and primary education, as well as teachers working in these fields.*

Keywords: *music; notation; education; aural skills; G-clef; time signature, key signature, staff/staves; spaces; meter; rhythm; noteheads;*

The Bulgarian education system recognizes the importance of fostering creativity in children and is working to provide more effective opportunities for collaboration using modern-day techniques. This text focuses on the practical application of music theory combined with technologies in music education. By proposing an innovative model for music education in primary schools, this document also emphasizes the presence of classical music in the auditory experience of primary school pupils (I–IV). The aim is to provide equal access to music literacy and awareness in an extracurricular environment, recognizing the positive impact that music can have. The text adheres to a clear and concise structure, avoiding sprawling descriptions and complex terminology.

This paper aims to demonstrate the positive impact of an innovative approach in introducing unfamiliar theoretical information in general school education music lessons. The paper shows that by employing modern techniques and technology, students can achieve a lasting understanding of the learning material. The new modern approach to music literacy introduced in the third grade enriches and expands the teaching techniques known at the time of the study. Organizing the educational process attractively stimulates interest in learning the theoretical part of the musical activities defined for the age group. The use of modern technology in music lessons promotes a creative atmosphere and generates positive emotions in children. Additionally, it establishes conditions for the formation of auditory habits and the development of artistic imagination.

The pedagogical research was implemented among a group of third-grade pupils who are about to become musicians, according to the standardized curriculum of the Ministry of Education. The presented methodological approaches aim to build on the basic knowledge and competencies acquired in the first and second grade. The third-grade curriculum introduces new concepts related to note literacy, including staff, clef, key signature, time signature, note names, pauses, meter, and measure. The methodological approach used allows for the extension of acquired knowledge through music performance practice, based on musically analytical, cognitive, social, and other competencies previously acquired in music class.

The curriculum provides three primary musical activities: perception, reproduction, and improvisation. These activities are designed to enhance students' talents and improve their musical abilities, which are crucial for success in musical pursuits and emotional connection with the language of music.

The pedagogical approach outlined may offer an effective method for comprehending musically theoretical concepts and memorizing them quickly. The methodological model aims to stimulate students' interest in music through the use of mobile devices or tablets, which may increase the efficiency of acquiring musically theoretical knowledge. By incorporating modern electronic technology and various technological solutions, the educational process can be enhanced, becoming a more engaging experience for children. The aim is to help students learn about the staff, clef, tone names, pauses, time signature, and measure with increased attention and interest.

Numerous passionate and knowledgeable pedagogues have extensively researched students' perception of music and their level of music literacy.

Dobri Hristov, Boris Trichkov, Liliana Vitanova, Gencho Gaytandzhiev, Andrei Stoyanov, Anton Nikolov, Svetla Krasteva, Benyo Totev, Trendaphil Milanov, and Penka Mincheva are legendary names in Bulgarian history due to their exceptional work and unwavering dedication to music teaching for many generations.

In the years following the Liberation, Bulgarian education underwent various educational models! But, thanks to our strong traditions and European practices, we have developed a cohesive educational system that prepared students to become specialists in different areas of life, including music. And let's not forget the significance and necessity of musical activities in the educational process - that's why music education has always been an important part of our curriculum! The concept of aesthetic education and amateur musicianship as a pathway to future professional success still exists today! This idea has inspired the development of pedagogical approaches and solutions by generations of music educators.

In his pedagogical work, Dobri Hristov emphasized the significance of children's musical education, particularly through Bulgarian music, song, and dance folklore (Mincheva 1994).

Boris Trichkov's Staircase method is an incredible tool that aims to improve the musical literacy level of students in regular schools by freeing them from the use of notes in music tuition. With this method, students can sing freely from sheet music during lessons, which is an essential skill for developing their abilities and forming their musical aesthetic taste (Mincheva, 1994). There is confidence in this method revolutionizing music education in modern Bulgarian schools, as it encompasses more than simply solfeggio work. With the help of a specialist music teacher, performing solfeggio independently is a difficult task.

Gencho Gaytandzhiyev passionately discusses the development of musical perceptions and their significance at length. He believes that „musical education is an essential component of the general, complex and harmonious growth of the personality, and that without the development of musical abilities music remains inaccessible to the perceiver and the possibility of its influence is liquidated“ (Gaytandzhiyev 1980, p.47).

The impact of music pedagogical activity on the complex development of the personality is considered and integrated into general school education worldwide. This includes the names of Emil Jaques-Dalcroze, Carl Orff, Wilhem Keller, Laszlo Dobszay, Erzsébet Szönyi, Dmitry Kabalevsky, Natalia Vetlugina, Irina Zolopova, Eduard Abdulin, Boris As-

safiev, Zoltan Kodály and Béla Bartók, who are outstanding examples in Bulgarian music pedagogy from whom experience is still drawn today.

Researchers are excited to develop methodological sequences and solutions that will help learners of all ages and musical talents quickly and easily assimilate musically theoretical information.

Irina Zolotova explores the interaction between musical art and painting, combining words with gestures and promoting awareness of musical messages and suggestions (Manolova 1988). On the other hand, Émile Jaques-Dalcroze highly recommends in his Rhythmic Gymnastics that students should be introduced to sound, rhythm, or instruments through synchronized exercises that combine physical movements with vocal and auditory manifestations, which can create a fun and engaging learning experience (Manolova, 1988).

Similarly, Carl Orff used German folklore as the foundation of his pedagogical model, which he expressed through the mechanisms of 'elemental musicianship', a method that has been proven to be effective and enjoyable for students (Manolova, 1988). The system is widely used and has many followers.

As Vetlugina (1980) points out, a clear understanding of the methods of musical expression is necessary to enhance the perception of music. It is important to acknowledge that there may be differing opinions on this matter, however by working together and valuing each other's perspectives, we can continue to improve our understanding and appreciation of music.

Vera Kuzminichna Beloborodova emphasizes the importance of developing musical hearing to enhance musical perception, which is fundamental to musical development and the activation of inner hearing (Beloborodova 1975).

Dmitry Kabalevsky supports the idea that children with exceptional musical abilities and a strong interest in music should consider pursuing a music career while advocating for general music education for all. The distinguished music educator suggested that the main goal of mass music education in schools is not solely to impart musical knowledge, but rather to use music as a means to positively influence the students' spiritual and moral development (Kabalevsky 1973). Therefore, music education plays a crucial role in preserving the intangible cultural heritage and national identity of a country. Emilia Kabakova suggests that the main goal in cultivating a young audience for music should involve meeting requirements related to both the folk musical heritage and ex-

amples of Bulgarian, European, and global musical culture (Karaminkova-Kabakova 2020, p. 186). Developing a musical culture and preserving national identity starts with instilling musically theoretical knowledge and competencies at an early age. Introducing students to the theoretical aspects of professional music helps to develop a solid foundation for forming musical tastes and preferences. Additionally, acquiring musically theoretical knowledge can improve critical thinking, and vocal and intonation abilities, and provide a foundation for building new musical competencies. This also fosters respect for professional art. It is important to note that the original meaning and quotations have been preserved, and the text is now more concise, precise, and grammatically correct.

Undoubtedly, each methodological unit has its place in the historical development of music pedagogy. However, it is important to acknowledge the technological advances observed since the beginning of the 20th century and the integration of mobile devices into the everyday lives of children and adults. Therefore, it may be necessary to consider a new approach in the pedagogical sphere to accommodate these changes. According to observations of third-grade students, it has been found that writing out a musical clef or a whole pentameter with different pitches and note values does not necessarily lead to practical application and memorization. In light of this, a methodological sequence is described below. It is based on past experiences and solutions. This sequence offers attractive possibilities for provoking interest in music literacy and its mastery through the tools of new technologies in the context of the 21st century. It promotes an understanding of music and demonstrates how musical notation can be integrated in a manner that aligns with the digital competencies and abilities of students in the relevant age range.

A novel method for developing musical literacy in third graders

The creation of the described methodological sequence covers various aspects of musical activity. All of the following points aim to develop practical skills and competence in children related to the professional realization of each musician:

- Becoming familiar with the piano keyboard and its use;
- Developing a sense of correct intonation;
- Mastering the one-line octave of music notation;
- Acquiring new theoretical knowledge, such as note values, time signature, and measures;
- Making logical connections and building upon old and new knowledge (mastering music notation is achieved through a specific scheme);
- Applying the student's notational literacy practically in both school and

a non-school environment;

- Multiplying the practical skills acquired in music class to family, media, and community settings;
- This innovative approach aims to enhance the child's communication with classical music. It seeks to establish a positive connection between the child and the music.

The approach involves implementing modern technological solutions and encouraging student interaction in a school environment. To achieve its methodological objectives, the approach utilizes:

- Mobile device;
- Reliable Internet connection.
- The possibility to download mobile applications free of charge;
- Interactive whiteboard;
- Multimedia projector;

The innovative model is utilized in several lessons, per the Ministry of Education's curriculum. Pupils can use a tablet or smartphone during the lesson. This model is appropriate for both music and general education teachers and students.

The format of the innovative model aims to provide a modern approach to information input.

- The innovative model of music literacy aims to enhance children's vocabulary through communication.
- Modern techniques and new technological knowledge are utilized in constructing the model.
- Technology and equipment are introduced to support the model, making it accessible to mainstream schools.
- The model's parameters are designed to be universal, allowing for comprehensive application in the work of every music teacher in a comprehensive school.
- The suggested model might provide chances for students to utilize their musical literacy in new ways.
- It would be beneficial to evaluate the impact of the innovative model on students' musical interest and their willingness to pursue musical activities outside of the regular curriculum.
- The methodological approach of the innovative method aims to activate listening practice and foster respect for classical music and its performers.

Organizing the structure of the innovative model

First lesson – a virtual piano keyboard is introduced.

The educator has already selected a virtual piano keyboard that is suitable, with the appropriate arrangement of keys and octave groups. It is recommended that students acquire this keyboard on their mobile devices. It's worth mentioning that utilizing a mobile device enables the download and installation of various mobile applications. Some of these applications may be relevant and financially separate from the requirements of the experiment.

Additionally, the virtual piano can be displayed on an interactive whiteboard using a multimedia projector, if one is available in the classroom. This feature enables direct sound production from the piano keys through touch, while also allowing for visual performance by both the teacher and students. If the school does not have this type of equipment, an acoustic piano or synthesizer may be utilized.

The use of a virtual piano covers several parameters, including:

- the memorization of the names of the tones of the note-ladder of the one-line octave and their placement on the keyboard.
- The reader can gain an understanding of how to interpret the placement of tones on a musical pentameter and apply them to a piano keyboard.
- It is suggested that the reader may improve their sense of tone and pitch by playing a given tone.

After becoming familiar with the name of the tone on the staff and its corresponding key on the virtual keyboard, all students will simultaneously play and voice the corresponding tone on their devices. This allows the music educator to monitor and correct any inaccuracies in the pupil's intonation process. The use of personal mobile devices enables the participants to vocally and instrumentally reproduce the entire tone ladder within one lesson. By using the virtual piano, students can develop their ability to distinguish the one-line octave from the musical sound chord both visually and aurally.

The virtual piano is easily accessible from any location, which helps to stimulate interest in it. The virtual piano is similar to mobile apps used by children during class and can be displayed on the teaching board. This technology allows the school music educator to have access to it at any time and from

any place. Personal mobile devices allow users to store the mobile application used during the lesson and to multiply the knowledge gained at home.

Second Lesson

Introduction of new theoretical information including staff, G-clef, and written notation of the musical ladder.

An important methodological requirement is to review the knowledge from the previous lesson before introducing any new information. In the second lesson, the teacher will introduce and help students understand and master new knowledge and competencies based on their demonstrated mastery level.

The first introduction to notation – the staff, G-clef, and the written notation of the first five notes of the ladder (C4 – G4) – is done by writing on the interactive board in the following order:

1. The structure of the staves – lines and spaces, the direction of their numbering, and their function – is explained.

The blank sheet music notebooks provided to the children contain pre-printed staves. The pupils copy down the information that the teacher presents on the blackboard concerning the use of the staves.

2. G-clef

Being introduced to the G-clef and remembering its place on the staff is essential for the later process of musical literacy. The teacher demonstrates how to draw a pictogram of the G-clef, which each child then repeats on the same board (interactively) and copies into his or her notebook. The child gradually begins to associate the graphic symbol with its functional role – the name and location of the middle G. This notehead, with its clef placement on the staff, influences how it is organized in note literacy.

3. Introduce pupils to the notes – G4, F4, E4, D4, C4

The reverse order in the sound order is consistent with the specific presence of the middle G on the second staff line, as noted in the preceding text. Pupils are introduced to the place of each tone on the staff and, in parallel, to its placement on the virtual keyboard. The teacher plays notes on the interactive board and the children respond by locating them on the

virtual piano in a game-like format. The activity concludes with singing the note. The intonation is controlled and directed by the educator. This approach helps children to retain new learning material more effectively.

In the third lesson, we introduce new knowledge about notation. Specifically, we cover the second part of the sound series, which includes G4 → A4, B4, and C5.

As with previous sessions, each lesson begins with a review and a short consolidation exercise. This unit completes the mastery of the notation of all the notes of the one-line octave, transferring them to the keyboard of the virtual piano and playing them.

Lesson four focuses on mastering note values.

The teacher provides a comprehensive explanation of each type of note duration and demonstrates them by tapping.

The pupils are asked to give a response in the form of a certain vocal (ah, oh, eh...) corresponding to the duration of the note, which the children are tapping in rhythm.

Recognition of note lengths is closely related to other concepts of music theory, such as rhythm, meter, time signature, measure, and barline.

To apply the added information practically, it is recommended to use familiar children's songs with a tonal range that corresponds to the notes and values being taught. Two suitable songs for the lesson are 'Clock' (music by Peter Stupel and lyrics by Georgi Avgarski) and 'My Dear Mammy' (music by Lazar Nikolov and lyrics by Ivan Genov).

These musical miniatures demonstrate sound-pitch relationships and various note values that occur in different meters and time signatures. The barline, indicated by a measure gap, is shown to be necessary. To gain a comprehensive understanding of the intricate metrical scheme, it is recommended that pupils sing and play the songs at least three times with the help of a music teacher. This approach will assist them in developing an awareness of pulsation, meter, and time signature naturally.

Considering the limited scope of the lesson and the complexity of play-

ing the song in a synchronized and rhythmic manner, it may be advisable to perform it with a smaller group of students. This approach would allow the music educator to provide individual attention to each child and correct any mistakes. Playing children's songs correctly involves several processes. These include singing the song as a class and using apps on individual phones and tablets for tapping on the beat and voicing. This pedagogical organization includes a method for verifying mastered information and a model for independent work at home using a virtual keyboard on a tablet or phone to play and sing the songs learned in class.

For the fifth lesson, it may be beneficial for pupils to consolidate and summarise their theoretical knowledge of notation.

The teacher has opted for children's songs with a limited tonal range that can be played easily on a virtual keyboard by all pupils at the same time as the rest of the class sings and taps. The use of the digital keyboard has resulted in a slower process, which has increased students' awareness and allowed the educator to have more control over the learning process. The fifth lesson aims to attain a satisfactory level of understanding and skill in music notation that can be utilized in all future music education courses.

Summary and Conclusions

The experimental work yielded positive results. A new methodological model for music literacy in primary school children is presented, which increases the effectiveness of educational work in music classes by developing interest in musical activities. The novel model expands the parameters of influencing the personality and stimulates interest in professional musical activity courses. The interplay between musical notation, musical instruments, and classical music offers opportunities for the acquisition of new knowledge and skills.

The sequence of thematic lessons related to the study of musical notation can facilitate the lasting and conscious acquisition of knowledge. This can be achieved through the performance of identical tasks in class and for independent preparation at home. Conducting the lessons in the presented order may stimulate pupils' interest in solving each successive task set by the music teacher. An experiment conducted in music teaching in the third grade leads to the following conclusions:

- The pupils show interest and curiosity in the innovative practice introduced.
- They readily and eagerly assimilate music theory information;
- Exercises related to memorization and consolidation of new knowledge were conducted playfully.
- The sense and ability to accurately intonate while singing is activated;
- A survey in the following school year showed that the innovative approach worked to the advantage of the participants;
- The proposed method of music literacy has achieved its aims and objectives.

It is important to acknowledge that this period can have a lasting effect throughout the individual's life cycle. Education during primary and junior secondary stages can significantly impact a child's growth and development throughout his or her life. The use of modern pedagogical models that incorporate multimedia and computer technologies in music education has been shown to increase the effectiveness of students' acquisition of music-theoretical knowledge. It is worth noting that this methodological model has been positively received by students and educators alike, which is a testament to its effectiveness. Furthermore, expanding students' musical culture can enrich their aesthetic experiences and enhance their ability to communicate through music. The adoption of new performing and listening habits, reflexes of evaluation, and self-evaluation enriches the emotional world through personal musical experiences and at the same time stimulates the intellectual fund of the school pupil. The presented model is based on Bulgarian and global practices, adapted to the context of the 20th century.

Notes

- Ministry of Education and Science website [viewed 30 June 2023] Available from: <https://web.mon.bg/bg/1699>
- Proposed Curriculum for Music in Second Grade. Website of the Ministry of Education and Science [viewed 30 June 2023] Available from: <https://web.mon.bg/bg/1997>
- Proposed Curriculum for Music in Third Grade. Website of the Ministry of Education and Science [viewed 30 June 2023] Available from: <https://web.mon.bg/bg/1689>

References

- Beloborodova, V., 1975. Muzikalnoe vospriatie shkolnikov. – Moscow: Muzika
- Vetlugina, N.A., 1980. Vozrast I muzikalnaia vospriemchivost. Available from V.N. Maksimov, Moscow: Muzika
- Gaitandzhiev, G., 1980. Masovoto muzikalno vuzpitanie. Sofia: Narodna prosveta [In Bulgarian]
- Kabalevskii, D.B., 2022. Muzika v vospitanii I razvitii rebenka. Кабалеvский, Д.Б., 2022. Moscow: Armita-Rus, ISBN: 978-5-413-01801-9
- Karaminkova-Kabakova, E. (2020) Muzikalното nasledstvo: kakvo ostava sled nas? Godishnik na SU "Sv. Kliment Ohridski" vol.113 p. 186 ISSN 2738-7062 [In Bulgarian]

Literature resources

- Beloborodova, V., 1975. Muzikalnoe vospriatie shkolnikov. – Moscow: Muzika
- Vetlugina, N.A., 1980. Vozrast I muzikalnaia vospriemchivost.-Available from V.N. Maksimov, Moscow: Muzika
- Gaitandzhiev, G., 1980. Masovoto muzikalno vuzpitanie. Sofia: Narodna prosveta [In Bulgarian]
- Kabalevskii, D.B., 2022. Muzika v vospitanii I razvitii rebenka. Кабалеvский, Д.Б., 2022. Moscow: Armita-Rus, ISBN: 978-5-413-01801-9
- Karaminkova-Kabakova, E. (2020) Muzikalното nasledstvo: kakvo ostava sled nas? Godishnik na SU "Sv. Kliment Ohridski" vol.113 p. 186 ISSN 2738-7062 [In Bulgarian]