

SHEET MUSIC AS A TARGET OF CROSS-DISCIPLINARY ANALYSIS AND A TOOL FOR TEACHING MUSIC TO STUDENTS OF PEDAGOGICAL UNIVERSITY

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Abstract: This paper provides an underpinning for theoretical and practical assertions constituting methodological framework for implementing the content-procedural approach in music education through the comprehension by pedagogical university students of sheet music; presents the results of an expert evaluation of indicators reflecting the level of a special sheet-music competence of music teachers in their professional activities; defines the structure and content of sheet-music competence of a graduate of pedagogical university, who is ready to address challenges that may be encountered in music education; analyzes the method for assessing the level of sheet-music competence of pedagogical university students and the results of such assessment over the recent years.

Keywords: pedagogical education, students, tool, music teaching, special sheet-music competence, musical art.

1 Introduction

The development of a cross-disciplinary analysis of sheet music as one of the directions in pedagogical science is related to the hermeneutics, which stands at the origins of the philosophy of understanding as the cornerstone of music education and as a tool for teaching music. The central research problem is the use of sheet music in the practice of music education, which is considered as a special competence of students capable of using structural components of sheet music during musical performance. In the study of E. V. Nazaykinsky (1988), the sheet music is viewed as "a memory of culture" because the sheet music "is a key component of the communicative process through which musical art is connected with human life" (p. 160). S. I. Savshinsky (1964) underlines that "despite all imperfections of the sheet music, composers manage to capture their creative ideas in it to the extent satisfactory to them, which allows a student studying this piece of music not only to learn its material side, but also to appreciate its ideological and emotional content" (p. 23). That is why in music education the category of sheet music is one of the most crucial in addressing the issues of studying musical art in the process of learning.

In pedagogical practice, music education is inextricably linked to reading and understanding the sheet music. The study of the difficulties arising in this process has found that the problems, which due to their specificity are an integral part of the system of general, vocational and additional education of children, arise not so much out of the students' lack of abilities, but because of their poor skills in reading the sheet music; they often work with sheet music only formally; they have difficulty in reading music notes; students lack the skills of music performance "based on a system of theoretical knowledge," which "becomes one of the necessary conditions for understanding the music content" and to ensure the fostering of "the value attitude towards this art form" (Berger, 2004). This creates problems in coordinating the content of music education at all stages of continuous education, ensuring consistency and clear goals.

2 Literature Review

In the history of mankind, the attention of researchers has always been drawn to the study of texts. Their structure was seen as a fusion of natural language and different semiotic systems. The text "is a message that exists as a string of symbols that is characterized by formal cohesion, meaningful integrity and formal semantic structure arising out of interaction occurring

between them" (Lukin, 1999). According to W. S. Bibler (1975), the text "is a string of signs or images that possesses certain content and meaning that is understandable" (p. 140). The text implies a combination of reading, interpretation and comprehension. Explanation of this should be sought in the general laws of the theory of message understanding and interpretation, i.e. hermeneutics, which was studied in detail by H.-G. Gadamer (1988), W. Dilthey (2001), P. Ricoeur (1973), M. Heidegger (2013), thanks to whom the understanding of texts in culture has been transformed to reading, comprehension, interpretation and living through the content-conveying artistic and figurative knowledge. Understanding is "the discovery of a meaning that is beyond, i.e. extends beyond the boundaries of the subject of understanding" (Frankl, 1969, pp. 3-4).

Art and education are spheres of human existence that are destined to recreate and introduce people to the values of the surrounding world. Yu. M. Lotman (2000) called art a special means of communication, a specially organized language. The sheet music is the art of music represented by written music notation. It is interpreted rather broadly and, in addition to notes, includes the whole system of elements to visually represent music, wherein notes can function. The elements of musical notation include staves; various types of keys; key alteration signs; various elements of note signs expressing the relative duration of sounds; meter signs; additional signs indicating extended duration of a sound (dot, fermata, league) (Nurnberg, 1953). According to the definition of E. Lieberman (1988), sheet music "is a semiotic system by means of which a composer objectifies (i.e. makes available to people) his/her inner mental creative activity and artistic ideas" (p. 34). The sheet music is a structure that acts both as an object of musical creativity and as a system of musical signs, an information message, a communicative unit (Kobozeva et al., 2015). Literature analysis shows that in publications the sheet music is considered as a system that "allows to transmit musical information over a distance through the use of graphical symbols and preserve it over time" (Barsova, 1997), as "a graphic representation of music that is used for its performance" (Vakhromeev, 1976), as "the visual analogue of musical sound, or recording of an audible or imaginary sound, or a series of visual instructions for performers" (Bent et al., 1980), as "a system of signs for recording music" (Dyakonov, 1990).

Axiomatically is the fact that sheet music which is a complex cultural-historical phenomenon in the art of musical, and the only means by which the values of musical culture with its centuries-old history have been preserved and have become part of the heritage of contemporaries. Socrates and Aristotle, Seneca and Pythagoras, Boethius and Thomas Aquinas, J. Kepler and A. Kircher, I. Kant and A. Schopenhauer, F. Nietzsche and others reflected on music. Through music, thinkers of the past tried to comprehend the emotional-sensitive, intellectual, aesthetic, volitional and ethical aspects of life. As a bearer of meanings and values of culture, music, which elements find reflection in the note as a written sign, is presented in the concepts of B. V. Asafyev (1963), N. A. Berdyaev (2018), A. F. Losev (2008), M. Lotman (1996), E. V. Nazaykinsky (1988), S. Rarrish (1958), Yu. N. Kholopov (2003), V. N. Kholopova (2014), and others.

The sheet music "is addressed by the composer to the performer of his/her music, relying on the fact that <...> this message will be read carefully and with understanding..." (Savshinsky, 1964, p. 23). However, this kind of message can be deciphered only subject to understandability of the language. The sheet music contains a multitude of instructions for a performer, which play a determining role in interpretation of music, a deep understanding of the language in which it is recorded. The connection between the composer's idea, expressed in the content and sheet music, and the interpreter represents a semantic mechanism of sheet music perception "composer-musical piece-performer", through

which the latter recreates the composer's idea (Asafyev, 1963). Therefore, interpretation is a creative process of realizing the composer's note material, the musical text (Korykhalova, 1979).

Understanding of sheet music is seen as a process of its reading and comprehension - revealing and reproducing the meaning of the musical piece, allowing the understander to navigate in the world of musical culture values. The above assertions serve as a frame of reference for exploring the sheet music as a tool for teaching music. Thus the educational vector should be directed not so much toward information and sign aspects of musical compositions, as toward cultivation of "a special attitude to the works of art, the surrounding world, the surrounding people and own self" (Razhnikov, 1980).

3 Research Methodological Framework

The research purpose was to explore sheet music as an object of cross-disciplinary analysis and to look into the specific aspects of its application, in particular, in the training of music students at a pedagogical university. The research objectives were to consolidate the theoretical knowledge about sheet music; to reveal the main attributes and distinctive features central to its use by students in their studies; validate the effectiveness of its application in the training of music students at pedagogical university by way of an experiment.

The research relied on theoretical methods (analysis of scientific literature, comparison, systematization of material on sheet music and its use in music education) and empirical methods (pedagogical experiment, questionnaire survey to assess how effective the use of sheet music is in the training of music teachers).

The experiment lasted from 2017 until 2019. Mordovian State Pedagogical University named after M. E. Evseviev served as an experimental base for the research. The experiment included 86 students of bachelor program of the 1st and 2nd years of study in the field of training Pedagogical Education and 18 teachers of the Department of Music Education and Music Teaching Methodology.

4 Results and Discussion

4.1 Content Aspect of Sheet Music Studying by Music Students at Pedagogical University

The scientific literature asserts that the image of modern pedagogical education comes from the accentuation of the values of professionalism, humanistic and humanitarian foundations of the higher school. According to the researchers, the solution to this issue is possible through implementation of the modular (Buyanova, 2015) and practice-oriented models of training (Shukshina et al., 2016), development of students' analytical thinking (Chinyakova, 2014), ability to understand music (Brajnin, 2009), competent reasoning (Morozova, 2013), self-guided education (Tsybin, 2016), interaction through dialogue (Militsyna, 2015), ability to structure information (Gilmanov, 2019), etc.

The sheet music is linked to addressing a specific task of pedagogical education aimed at fostering professional competence, the variable part of which is a special sheet-music competence. This competence is representative of a specific subject-oriented area in the professional profile of a music teacher related to the ability to read sheet music. We understand *special sheet music competence* as a personal characteristic of a specialist reflecting his/her ability to read sheet music and readiness to comprehend, emotionally perceive and reproduce the cultural and artistic meaning of musical art through creative music performance.

A musician graduating from a pedagogical university with a special sheet music competence is supposed to *have the knowledge of* the main components of sheet music (musical literacy, music theory), *the ability to* comprehend and grasp the music notes by using the analytical skills (analyze pitch

modulation of the melody, its tonality and metro-rhythm coordinates, etc.), good music performance *skills* (playing an instrument, singing).

The sheet music refers both to the teaching and learning tools, is a tangible (a separate text) and ideal (a piece of musical art) tool for teaching music. Being tangible sheet music conveys to the performer the ideas and images produced by the composer. At the same time, a person creating and comprehending music may be a composer, a performer, a listener, a music teacher, and a cultural researcher. Each of them, comprehending music through written notes, creates his/her own musical space, own spiritual world, generating, as N. A. Berdyayev (2018) expressed it, the creative energy of being.

According to L. S. Vygotsky (1986), it is through the sheet music that an individual gets acquainted with culture, and consequently boosts own development. Teacher's development implies personal growth, which is expressed in the aspiration to become increasingly competent.

4.2 Procedural Aspect of Sheet Music Studying by Music Students at Pedagogical University

In pedagogy, as well as in cultural studies and philosophy, cultural interaction is seen as "a communication" because it implies the perceptual process. As a result, a learner (a subject) perceives objects related to the performed activity. Specificity of the perceptual process in each case stems from the semiotic nature of the object of perception, for example: musical-perceptual (Vardanyan & Kitaeva, 2019), social-perceptual (Vardanyan et al., 2015).

The cornerstone of the learning process is the development of students' special sheet-music competence through the sheet-music approach to teaching music in the context of pedagogical education. The logic of this process hinges on stability as a leading property of music education, which determines the sequence of unfolding in time of three measurable characteristics of competence (indicators): perceptual-educative, perceptual-cognitive and activity-creative. The dominants in their content emanate from the possibilities of making special musical disciplines taught in the university sheet-music orientated and reflect the processes of musical thinking and perception; the content of music education; music performing activity. The training should pursue a goal of fixing in the consciousness of students the semantic moduses of sheet music, with musical performance as its embodiment and interpretation being the final stage of learning the products of musical creation.

The aforesaid has allowed to reveal a range of methods for implementing the sheet-music approach to music education based on the dialectical combination of special and general pedagogical methods. At the perceptual-educative level, most rational is the use of the information-receptive method, the method of contrastive description of musical pieces and the method of comparison. At the perceptual-cognitive level, useful are the method of complex analysis (genre, stylistic, etc.), the method of problem presentation and the partial search method. At the activity-creative level, these are the method of practical creative modeling, the method of genre interpretation, the method of genre modeling, and the research method.

This triad of methods is a basic framework for developing the music teaching methodology with orientation toward sheet music in all musical disciplines.

4.3 Experimental Validation of the Effectiveness of the Content-Procedural Approach to the Studying of Sheet Music by Music Students at Pedagogical University

Experimental validation of the effectiveness of the content-procedural approach to the studying of sheet music by music students at pedagogical university was stepwise and followed the logic of the music teaching process.

At the ascertaining stage of the experiment, during which 86 bachelor students of the 1st and 2nd years of study in the field of training Pedagogical Education and 18 teachers of the Department of Music Education and Music Teaching Methodology were interviewed, the diagnostics of the initial level of students' knowledge in the sheet music was performed. Traditional oral and written surveys and conversations became the method for measuring the level of students' knowledge in the sheet music. Students were offered to answer the following questions: do students recognize the problems they have in working with sheet music; at what stages of work with sheet music do they face difficulties; what is causing problems in work with sheet music. As concerns the subject of interest to us, the results were as follows: 80 % of the respondents pointed to the difficulties with initial reading of sheet music, 60 % noted the problems in memorizing the sheet music and 40 % in its reproduction.

Teachers had to evaluate the following: the ability of students to correctly read the notes; the knowledge of and ability to recognize the metro-rhythmic patterns of a melody, the musical and expressive means (tempo, register, sound strength, timbre), the role in the rendering of specific content; skills in conveying the features of musical style, traditional features of the genre, the form prototype by looking at the notes. The diagnostics has shown the following: students' knowledge about the sheet music was scattered, they faced difficulties with defining categories of musical notation, they were not able to compare the means of musical language and musical expressiveness with style attributes of performed musical piece, which indicates poor analytic abilities (80 %); in performance of musical pieces students relied mainly on intuition and emotional tone of the piece (53 %). Having analyzed the performance of musical pieces by students, teachers noted that the main purpose of memorizing the musical piece was to perform it from beginning to end without mistakes, without thinking over the piece performed (68 %). Interpretation of music was generally not supported by the theoretical knowledge gained at the initial stage of musical education.

The analysis of results revealed the pedagogical problems related to the unsatisfactory level of students' skills in reading the sheet music as a system of theoretical knowledge; the low level of musical thinking and artistic consciousness that are necessary conditions for understanding the content of music.

86 participants of the ascertaining stage of diagnostics were divided into two groups: the control group (CG) and the experimental group (EG).

The method for strengthening the sheet-music competence was tested during musical performance disciplines – "Music and Instrumental Training" (piano, button accordion, piano accordion) and "Musical and Vocal Training". This criterial area includes analysis of the content of musical disciplines that is intended to identify their sheet-music component, as the object of study common for all these disciplines is the performance of music and all of them pursue one goal - the comprehension of a musical piece and personal comprehension of its content "ciphered" in the notes. The main feature of these disciplines is the individual form of teacher's work with student, which has its own specifics: consideration of individual characteristics and abilities of student; the choice of an individual performance program (selection of musical pieces), corresponding to the basic curriculum and contributing to the solution of individual pedagogical tasks.

The learning outcomes of students were assessed based on the assignments performed by students with the help of perceptual-educating, perceptual-cognitive and activity-creative indicators. Indicators of special sheet-music competence were represented by the following levels: threshold - the task is completed, but only formally, with minor remarks (the student does not like to work with the sheet music, faces great difficulties with its analysis, has superficial knowledge of the history of musical art; is able to distinguish elementary semantic units in the text, but does not try to synthesize them to get a complete picture; does

not show initiative in revealing the author's intended meaning in the musical piece; is not emotionally engaged in the performance); basic - the task is performed without any remarks (the student is not afraid to work with the sheet music, although has some difficulties with its analysis; has overall knowledge of the history of musical art; seeks to understand the logic of music construction by analyzing its semantic units; is capable of conveying the content of the musical piece almost without any outside help in accordance with the author's intention and own perception, but is emotionally rigid in the process of performance); advanced - the task is performed creatively, according to the optimal scheme (the student likes to work with the sheet music and does not have significant difficulties with its analysis; has deep knowledge of the history of musical art; is able to combine the structural units of the sheet music into finished holistic structures; shows initiative in revealing the author's intention and needs no outside help for its interpretation; is emotionally free).

The indicators showing levels of special sheet-music competence were measured with the help of questionnaires, expert evaluation and self-assessment, tests, quizzes, instrumental or vocal performance of musical pieces. All tasks were practice-oriented and were performed by students during the classes. The average indicators of the level of special sheet-music competence in experimental and control groups are presented in Table 1 compiled by the authors.

Table 1 Indicators Reflecting the Level of Special Sheet-Music Competence

Competence Indicators	Level (%): High/ Basic/ Threshold	
	Control group	Experimental group
Perceptual-educative	18/21/61	38/42/20
Perceptual-cognitive	17/23/60	36/44/20
Activity-creative	20/27/53	39/43/18

Source: authors

At the perceptual-educative stage, students acquired theoretical knowledge and learned to recognize the artistic features of musical pieces through the music performance. At the perceptual-cognitive stage, students based on theoretical knowledge and music performance experience gained at the perceptive-educative stage, learned to analyze the manifestation of features peculiar to the individual style of composers. At the activity-creative stage, students learned to implement in practice the acquired knowledge in music theory and styles, and skills in the instrumental performance.

The table demonstrates positive dynamics in the indicators showing the level of special sheet-music competence of students at pedagogical university, which proves the effectiveness of research.

5 Conclusion

Sheet music approach to teaching music directed at nurturing meaningful attitude of students to the art of music is based on the leading role of text being understood as a system of musical signs, informational message, creativity in music composing. The practical value of the above approach is that the theoretical conclusions and proposed recommendations concerning academic methodology may be useful not only in preparing teachers at the university to promote creativity of students in the work with sheet music and to facilitate the professional and creative development of future teachers, but also at any other level of the system of continuous music education.

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