

Methods for developing skills in learning choral scores in future music teachers

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ABSTRACT: Professional training of future music teachers at university involves mastering conducting and choral performance. Success in studying choral works depends on students' ability to learn choral scores. The ability to analyse and understand musical notation affects the artistic value of the performed work. The aim of the study is to identify effective methods for developing the skills of future music teachers in learning choral scores, aimed at optimising the process of learning choral works. The main research methods are theoretical, empirical and statistical. After the experiment, effective methods for developing skills in learning choral scores by future music teachers were identified: the method of simultaneous recognition, the method of emotional and content analysis of the work, the algorithm of initial and detailed familiarisation with the score, the method of sketching works and concentrated reasoning. The application of these methods in the experimental group led to an increase in the number of students with average (+6.1%) and high (+4.2%) levels of proficiency in learning choral scores. The low level decreased by 8.3%. Analysis of the research results revealed a positive trend in the development of skills in learning choral scores among future music teachers, which indicates the effectiveness of the proposed methodology.

KEY WORDS: methodology; skills; choral score; professional training; music teacher;

Introduction

The current paradigm of arts education in Ukraine places high demands on the professional training of future music teachers. Their professional role is multifaceted, combining the functions of a teacher, choir director, performer and educator. One of the cornerstones of such a specialist's professional competence is the ability to work with choral scores – complex, multi-layered structures that require not only technical reading

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of the musical text, but also deep analytical understanding and artistic interpretation.

Many years of teaching experience in higher education institutions show that students often encounter difficulties when transitioning from the mechanical reproduction of notes to a holistic grasp of a piece's musical character. The process of mastering a score is often haphazard, which slows down the development of professional independence in future teachers. Consequently, there is an urgent need to develop and implement a comprehensive methodology that would systematise the stages of working on a choral piece and stimulate students' inner ear and analytical thinking.

The issue of choral conducting training for future music teachers has been addressed in the works of renowned methodologists and researchers such as Kozyr & Fedoryshyn (2023), Maltseva et al. (2025), Dite & Vavilkin (2025), and Thorgersen et al. (2016). Issues relating to the interpretation and analysis of musical scores are presented in the works of Pomerleau-Turcotte et al. (2023) and Kim-Boyle (2019). In particular, the article by Kozyr & Fedoryshyn (2023) states that "the performer must see absolutely everything in the author's text – the artistic content, phrasing, articulation, dynamics, terminology, and so on. All this helps to fulfil the main task of performance – to penetrate as deeply as possible into the creative intent of the composer and convey its artistic value to the performers" (p. 32). In the research study by Pomerleau-Turcotte et al. (2023) proposed an original strategy for sight-reading musical notation, based on the interconnection between human body movements and rhythmic and combined notation, as well as the correlation between musical knowledge and automatic skills with rhythm, pitch and combined notes. The researchers identified a classification of strategies that ensure successful sight-reading, including: 1) managing attentional resources; 2) decoding notation; 3) anticipating future content and potential difficulties; 4) using the body to perform the rhythm; 5) constructing mental representations of sounds and relying on them; 6) using musical knowledge; 7) relying on automatic skills (Pomerleau-Turcotte et al., 2023). At the same time, it has been experimentally proven that relying on automatic skills is the most effective prerequisite for a high-quality result.

In their work, Kim and Boyle (2019) developed a technology for creating an immersive effect, involving the use of generative three-dimensional notation to represent musical forms, which facilitates physical interaction with the score, in which the musical work is viewed as an emergent property of an open piece. However, despite a significant number of developments, the aspect of developing specific technological skills for mastering the score in the context of intensified learning requires further research and the development of effective methodologies to support this process.

Method

In the course of our research, we employed a comprehensive set of methods, including: theoretical methods – the study of specialist literature, analysis, synthesis,

comparison and modelling, which were used to develop an experimental methodology for fostering skills in the interpretation of choral scores; empirical methods – observation, interviews, surveys, questionnaires, testing, pedagogical experiments, and quantitative and qualitative analysis of research results; and methods of mathematical statistics, which enabled us to experimentally identify effective methods for developing skills in mastering choral scores among future music teachers.

Participants

A total of 124 students from higher education institutions – future music teachers specialising in Secondary Education (Arts. Music) – were involved in the experimental study. To ensure the quality of management and control over the course of all stages of the formative experiment, the optimal size of the representative sample of respondents in the control and experimental groups (62 respondents in each) was determined using a method of planned mechanical selection from the general population of the study. The age range of the experiment participants (19–21 years) is based on psychological research, in which this age is considered the most sensitive period for the optimal development of personal skills, in particular, the skills required to learn a choral score.

Instruments.

During the development of the diagnostic methodology, we analysed teaching materials and conducted a series of pedagogical micro-studies: discussions, interviews, and tests involving students and lecturers in choral conducting and choral music. Analysis of the responses revealed that in both study groups, the majority of students experienced difficulties in reading choral scores (52%), the vast majority carry out this type of activity under the guidance of a teacher (74%), and only a small percentage of future specialists are able to independently analyse the musical text, carry out an artistic and pedagogical analysis, and develop their own concept of artistic and expressive performance (12%).

To assess the actual level of proficiency in interpreting choral scores, experts were asked to complete the 'Expert Assessment Forms on the Correlation between Logical Balance and Emotional Intensity in the Performance of Choral Scores' that we had developed.

Procedure

The experimental task involved students performing pieces they had learnt independently – playing the choral score on an instrument. The experimenter and choral conducting tutors completed evaluation forms in accordance with the established criteria: the logical balance and emotional richness of the choral score performance, in line with the focus of the students' attention (internal and external).

The first criterion, relating to the focus of internal attention, is determined by the logical structure of the musical material, which was assessed according to the following

parameters: the focus of internal attention on reproducing the cohesive form of the musical work; the logical development of musical themes (parts of the score); adherence to the appropriate tempo; the reproduction of partial and overall climaxes; the correspondence of the instrument's sound to the dynamics of the piece. The assessment of the first criterion, in accordance with the focus of external performance attention, was carried out based on the presence of technical errors in the performance and was evaluated according to the following criteria: the maintenance of caesuras, pauses, long notes and fermatas; the absence of textual errors; and the complete execution of the choral score's texture.

The assessment of the second criterion – the emotional intensity of the choral performance in relation to the focus of attention – was carried out by measuring the representation of the work's figurative and emotional content, which was evaluated according to the following parameters: the focus of attention on the emotional rendering of the artistic image; 'deep immersion' in the artistic image; the vividness of the emotional palette in the portrayal of the characters of musical images; and the adequate reproduction of the emotional richness of the work's content. The assessment of the second criterion, based on the external focus of attention through manifestations of emotional experience of the image, was carried out according to the following parameters: personal emotional engagement with the piece; correspondence of the performer's movements to the content of the piece; expressiveness of the performer's gestures and facial expressions; and the artistry of the performance.

Following mathematical processing of the data using the formula: $(+X) + (-Y) : 8$, the average score of the expert panel members was calculated for the logical balance of the choral score – L – and for emotional intensity – E. The number of points awarded depends on the difference in the ratio of the indicators of logical balance (L) and emotional intensity (E), as well as on their qualitative characteristics ("+" or "-"). A high level (3 points) is awarded when both parameters are positive ("+") and the difference in the ratio between them ranges from +2 to +3 points. For example, parameters with numerical values where $L \text{ or } E \leq +3$ and $\geq +2$ are classified as a high level of balance in the ratio of logical deliberation and emotional intensity ($L=E$).

Values are classified as 'average' (2 points) when the L and E indicators, both with a '+' sign, are exactly equal to one another within the range of +1 to +1.9 (or with a margin of error of 0.3), as well as when one of the parameters L or E is of high quality (from +2 to +3) and has a significant advantage over the other, including when one of them may be of low quality, i.e. with a '-' sign. For example, $L=+2.6 > E=-1$, which in such cases indicates a significant advantage of logical balance over emotional intensity.

All other possible outcomes, where both the logical soundness (L) and emotional intensity (E) indicators receive a negative rating from the experts (from -3 to -1), as well as those yielding a zero result, are scored as 1 point (since the activity in question was

nevertheless carried out) and indicate a low level in the assessment of the indicator under study.

Results

Following the scoring process, the levels of proficiency in students' ability to interpret choral scores were determined using expert evaluation forms. Positive assessments in terms of logical balance and emotional richness were found in only 1.3% of students, who demonstrated high artistic ability and a harmonious balance in directing their attention both to the logic of the musical material and to the reproduction of the artistic image. Respondents in whom one of the specified parameters predominated – a focus on the accuracy of performing all nuances, performance technique, or concentration solely on the emotional reproduction of the artistic image (which in some cases made it difficult to maintain the tempo) – accounted for approximately 26.6%. Most future music teachers performed the piano scores with a significant number of errors and deviations from the tempo, indicating a lack of focus and a failure to convey both logic and emotion in their artistic interpretation. The group receiving low expert ratings comprised 72.1% of the respondents.

Discussion

The effectiveness of developing skills in interpreting choral scores depends directly on the systematic approach taken by the student: from preliminary theoretical analysis to vocal and choral intonation and conducting.

The foundation of any performance is the musical score of the work, without which performance is impossible. In our study, particular emphasis was placed on the initial stage of learning a choral work – working on the score (choral score). The development of skills for mastering the choral score among students in the experimental group was carried out in accordance with the structure of reading a choral score, which consisted of mastering the following stages: 1) a cursory acquaintance with the score (forming a general impression of the music and the main artistic images); 2) a detailed analysis of the choral work (a gradual immersion into the essence of the work); 3) the future conductor's engagement with the artistic performance concept of the work (the culmination of all previous work marks the final formation of the performance concept, the individual interpretation of the work and the plan for its realisation).

During the stage of familiarisation with the written text of the choral score, we employed the method of simultaneous recognition. Its implementation is based on the concepts of popular speed-reading techniques, grounded in the principles of systematic development of attention and sight-reading of musical works (Abdullah, 2018; Karim, 2022). Thanks to the capabilities of the human eye, a conductor, provided their attention is properly focused and their visual and auditory systems, vocal apparatus and cognitive processes are well-coordinated, is capable, within a few seconds, of perceiving,

“decoding” and generating into sound images (internal mental sound) a single page of a musical score (Golyk, 2000; Pomerleau-Turcotte et al., 2023). On this basis, it is important to be able to uncover the underlying meaning of the musical notation. Thus, the overall image is perceived as a simultaneous image of the successive process of musical sound (simultaneous – occurring at the same time (thinking along the vertical axis of the score), successive – unfolding over time (thinking along the horizontal axis of the score)) (Furtwängler, 1991). Taking into account that the musical text is the sign system of the work, the context is the ideal conception, the construction of thoughts and feelings, emotions, and the subtext is the actual image that should arise in the listener, the quintessence of their aesthetic experiences and philosophical conclusions (Golyk, 2000, p. 44), we can state that the speed of grasping the essence of an unfamiliar work at the stage of initial familiarisation with the choral score comprises several stages:

1. referential-communicative (“referat” – essay, overview; communication – means of conveying information);
2. logical-semantic (understanding the logical structure of the text);
3. expressive-semantic (musical notation, musical means of expression, performance markings);
4. emotional-expressive aspect (comprehension and personal experience of the composer’s emotional intent, one’s own attitude);
5. concluding section, the creation of the semantic subtext of the choral work.

The introduction of the method of simultaneous choral score recognition required a certain level of preparation on the part of the students. In choral conducting classes, the method of the attention-guiding algorithm was applied during the initial familiarization with the choral score. This algorithm involved directing students’ attention to a set of primary orientational operations, the performance of which during the perception and analysis of the work ensures the unfolding of the logic of the artistic concept of the choral work, as recorded in the musical text of the score. The proposed algorithm consisted of specific structural operational blocks, which focused attention on: 1) the poetic text and the exploration of its emotional and semantic content; 2) the musical form of the work; 3) musical means of expression (key, tempo, tessitura, characteristics of melody, rhythm, choral texture, dynamics, form, etc.); 4) performance characteristics of the work (the composition of the choir, performance difficulties).

In the process of mastering the algorithm for an initial familiarization with choral work, the analytical operations of analysis, synthesis, comparison and generalization were subordinated to the revelation of the work’s artistic and imaginative content. With logic actively at work, the emotional aspect of choral work took on a leading role, since the development of the emotional content of any musical work is always subject to a certain logic. A semantic analysis of the text helped to develop the students’ understanding of

the choral work's content, the composer's creative intent, and the logical justification for the emotional interpretation of an individual performance concept.

During the initial familiarization with the score of a choral work, the ability to sight-read musical notation is one of the most important skills for a music teacher's future professional practice. Surveys of students revealed that insufficient attention is paid to the development of this skill during the learning process. Therefore, in choral conducting classes with students in the experimental group, various practical exercises were carried out to practice sight-reading (of musical scores):

- playing the musical parts of some choir sections whilst the others are sung;
- singing the choir parts from the score, reading both the vertical and horizontal lines;
- singing the melodic line of the piece as it appears in different voices;
- alternating between mental reading (singing in one's head) and singing one of the choral parts;
- playing the score whilst highlighting one of the choral parts.

The systematic application of these modifications to the reading of choral scores helped students develop the ability to reproduce all sections of a choral work with the appropriate nuances (either mentally or aloud) and to cultivate their musical and aural perception. The pedagogical effectiveness of this method of score learning in our study was complemented by the method of mental reading of choral works. In our work with a group of students during classes in the "Choral Class and Practical Work with a Choir" course, we expanded the scope of the pedagogical impact of this method.

In the context of our study, the method of sight-reading was aimed at the collective development of skills for learning the score of a choral work. During the collective reading of the choral parts of an unfamiliar choral work, under the direction of the conductor (teacher, student). The piece was performed collectively from start to finish through the piecemeal reproduction of choral parts by various groups of performers: choristers singing a single voice, or a group of choristers singing one part, two or more parts, or the accompanist. All of them performed the score following the conductor's gestures at the indicated points. The students performed the rest of the choral piece by singing internally, whilst paying attention to what was happening at that moment in the performance. This method helps to develop aural skills in combination with simultaneous visual perception and analytical processing of information.

In our study, the method of mastering the algorithm for the detailed analysis of choral works proved to be of methodological value. Its essence lay in enabling students to acquire an algorithm for performing analytical operations in a specific sequence. When analysing the musical score, students provided clear answers: what idea and content the literary text conveys; by what means of musical expression the composer recreates the musical image; which artistic devices most accurately convey the work's content in actual

performance; and what technical difficulties may arise in the process of realising the ideal performance concept. By following this sequence of analytical operations, students acquired the skills to independently analyse the text of a choral work.

During the implementation of the operations in the algorithm for the detailed analysis of a choral work, the method of concentrated reasoning was applied. Initially, with the help of the teacher's questions (and subsequently on their own), the students identified ever new characteristics of musical and expressive means, their artistic and functional significance, and the possibilities for their realisation in performance interpretation. Subsequently, this activity took on an independent character and became a personal skill of the future music teacher.

An additional method for developing skills in interpreting choral scores is the method of emotional and semantic analysis of a musical work. Its distinctive feature lies in a holistic analysis aimed at uncovering the overall meaning of the work by identifying discrete, meaningful elements, revealing the connections between them and determining the nature of these connections, that is, by identifying intermediate meanings.

With the aim of developing skills in reading choral scores, we have employed a method involving the simultaneous reading of several pieces, based on the human mind's ability to 'be present in several information streams at once' (Volkova, 2006, p. 102). The pedagogical value of this method lies in its ability to expand the scope, stability, distribution and shifting of students' attention. This significantly stimulates the development of the skill of quickly orienting oneself within an information stream and simultaneously evaluating it.

At the initial stage of learning the method of sight-reading multiple pieces, students analysed short choral miniatures or excerpts from works of varying styles simultaneously. In our research, we employed methodological techniques aimed at developing performance attention whilst familiarising students with the choral score. Among these techniques, the following are particularly effective: comparing objects based on similarity, comparing objects with varying degrees of similarity, and introducing an additional criterion for comparison (Volkova, 2006). By working on the students' attention, we were able to direct it towards important features of the musical text – the form of the piece, its modal and tonal characteristics, phrasing, dynamics, text and much more.

We obtained the results regarding the perception of the artistic and imaginative content of a choral work by having students record their views in written annotations. In these, the respondents outlined not only the logic behind the reproduction of the work's text, but also their emotional response to the work. Subsequently, the development of these skills depended on the gradual increase in the complexity of the tasks – an increase in the number of works, an improvement in the quality of their analysis, whilst gradually optimising the time spent.

In the process of familiarising students with many choral scores, a method of sketching out works was introduced, which has become widely used in the context of piano pedagogy. According to Padalka (2008), "when working on a sketch, the student should gain an understanding of the content of artistic images, grasp the general character of the artistic work, and identify the specific features of the use of artistic means of expression; at the same time, they are not required to analyse the work thoroughly, study it in depth, or work through it meticulously in detail" (p. 132). This method has been adapted to suit the ways in which school choirs learn the musical notation of choral songs: sight-reading the melody (playing or singing) and the accompaniment; performing simultaneously (sight-reading the music) the vocal part and the instrumental accompaniment; simultaneous performance (sight-reading) of the melody by voice and conducting of the entire piece and accompaniment; simultaneous singing of the melody (sight-reading of the musical notation) and conducting of the other voices, etc.

The increased use of analytical approaches to the study of choral scores, a systematic pedagogical approach, and the application of various teaching methods and techniques have contributed to the systematic development of skills in interpreting choral scores as part of the professional training of future music teachers.

Conclusions

The theoretical rationale and experimental validation of the developed methodology for fostering skills in the interpretation of choral scores among trainee music teachers are based on a comprehensive combination of analytical, performance-based and creative components. Analysis of the results of the assessment tests has enabled the identification of the most effective methods and techniques for developing skills in reading choral scores, including: the method of simultaneous recognition of choral scores; the method of directing attention during initial familiarisation with a choral score; the method of mental reading of choral works; the method of mastering the algorithm for detailed analysis of choral works; the method of concentrated reasoning; the method of emotional and semantic analysis of a musical work; the method of simultaneous reading of several works; the method of sketching out works.

As a result of applying these methods, the number of students in the experimental group with an average level (from 35.4% to 41.5%) and a high level (from 21.3% to 25.5%) of proficiency in learning choral scores increased. The number of students with a low level decreased by 8.3% (from 42.3% to 34%). Thus, analysis of the research results revealed a positive trend in the development of skills for mastering choral scores among future music teachers – the participants in the experimental group. This indicates the effectiveness of the proposed methodology, as well as the efficacy and effectiveness of the tested methods, which, overall, ensure the optimisation of the study and performance of choral works.

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