INTRODUCTION OF INNOVATIVE TECHNOLOGIES IN THE STUDY OF MUSIC DISCIPLINES IN HIGHER EDUCATIONAL INSTITUTIONS OF UKRAINE

INTRODUÇÃO DE TECNOLOGIAS INOVADORAS NO ESTUDO DE DISCIPLINAS MUSICAIS EM INSTITUIÇÕES DE ENSINO SUPERIOR DA UCRÂNIA

INTRODUCCIÓN DE TECNOLOGÍAS INNOVADORAS EN EL ESTUDIO DE DISCIPLINAS MUSICALES EN INSTITUCIONES DE EDUCACIÓN SUPERIOR DE UCRANIA

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ABSTRACT: The problem of modernization of the modern educational system in Ukraine, updating the content and organizational forms of teaching and education, techniques and methods of pedagogical work in higher education encourages the search for new methods and tools of teaching and learning, introduction of innovative technologies, including information and communication. The study considers the application of multimedia technologies, interactive learning and coaching technologies in the study of music-theoretical and music-historical disciplines ("Music Theory", "Solfeggio", "Harmony", "Polyphony", "Analysis of Musical Works", "History of World Music" and "History of Ukrainian Music"), which constitute the fundamental basis of musical training of future professionals, the development of their musicological competencies of various types and content, as well as in mastering the disciplines ("Piano as the Major Instrument", "Choral Conducting", "Choral Class"), which develop special competencies.

KEYWORDS: National music culture. Innovative information and communication technologies. Modernization of art education. Informative youth environment. Worldviews.

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RESUMO: O problema da modernização do sistema educacional moderno na Ucrânia, atualizando os conteúdos e formas organizacionais de ensino e educação, técnicas e métodos de trabalho pedagógico no ensino superior, incentiva a busca de novos métodos e ferramentas de ensino e aprendizagem, introdução de tecnologias inovadoras, incluindo informação e comunicação. O estudo considera a aplicação de tecnologias de multimídia, aprendizagem interativa e tecnologias de coaching no estudo de disciplinas teórico-musicais e histórico-musicais ("Teoria da Música", "Solfejo", "Harmonia", "Polifonia", "Análise de Obras Musicais", "História da Música Mundial" e "História da Música Ucraniana"), que constituem a base fundamental da formação musical dos futuros profissionais, no desenvolvimento das suas competências musicológicas de vários tipos e conteúdos, bem como no domínio das disciplinas ("Piano como o Instrumento Maior", "Regência de Coral", "Aula de Coral") que desenvolvem competências especiais.

PALAVRAS-CHAVE: Cultura musical nacional. Tecnologias inovadoras de informação e comunicação. Modernização da educação artística. Ambiente informativo para jovens. Visões de mundo.

RESUMEN: El problema de la modernización del sistema educativo moderno en Ucrania, la actualización del contenido y las formas organizativas de la enseñanza y la educación, las técnicas y métodos de trabajo pedagógico en la educación superior fomenta la búsqueda de nuevos métodos y herramientas de enseñanza y aprendizaje, la introducción de tecnologías innovadoras, incluyendo información y comunicación. El estudio considera la aplicación de tecnologías multimedia, aprendizaje interactivo y tecnologías de coaching en el estudio de disciplinas teórico-musicales e histórico-musicales ("Teoría Musical", "Solfeo", "Armonía", "Polifonía", "Análisis de Obras Musicales", "Historia de las músicas del mundo" e "Historia de la música ucraniana"), que constituyen la base fundamental de la formación musical de los futuros profesionales, el desarrollo de sus competencias musicológicas de diversos tipos y contenidos, así como en el dominio de las disciplinas ("Piano como Instrumento Mayor "," Dirección Coral "," Clase Coral "), que desarrollan competencias especiales.

PALABRAS CLAVE: Cultura musical nacional. Tecnologías innovadoras de la información y la comunicación. Modernización de la educación artística. Entorno informativo para los jóvenes. Visiones del mundo.

Introduction

The process of development of higher music education in Ukraine is determined in the general context of European integration by focusing on fundamental values and the latest technological achievements of mankind. Since the activities of higher educational institutions of Ukraine today are aimed at training competitive workers in the labor market, the goals and objectives of such training are focused on creating conditions for pedagogical creativity and professional competence of music teachers, including the formation of new approaches to teaching pedagogical technologies, ability to the integration of artistic experience, the

development of creative qualities of the teacher's personality, high-level information and communication culture (ALLALYEV, 2019; NAZARTSEVA *et al.*, 2019).

The use of information and communication and innovative technologies in the study of musical disciplines in higher educational institutions of Ukraine based on the creative heritage of Galician composers of the late 19th – first third of the 20th century is the purpose of this study, because this subject has not been comprehensively covered.

Evolution of Galician musical culture of the 19th-20th centuries is covered in the studies by L. Kyianovska (2002; 2007), L. Romaniuk and M. Cherepanyn (2016; 2020), the revival of the heritage of Ukrainian composers in the modern piano pedagogical repertoire is covered in the studies by I. Novosiadla (2020; 2011; 2014), the thematic collection of scientific articles (PYLATIUK, 2012), and its promotion in modern art projects – in the collective article of teachers of Vasyl Stefanyk Precarpathian National University (KARAS *et al.*, 2020). O. Berehova's monograph (2006) covers the problem of communication in the socio-cultural space of Ukraine. Innovations in the teaching of music-theoretical disciplines in the modern artistic paradigm are analyzed by V. Dorofieieva (2018) and L. Havrilova (2017), innovative forms and methods of teaching in the piano class – I. Novosiadla (2018), I. Taran and T. Vadaska (2019), L. Li (2018), features of coaching were covered by V. Brych and M. Nahara (2009), L. Obukh (2018), J. Renton (2009) and R. Chakravarthy (2011), the organization of educational process in quarantine is covered by H. Karas (2020).

The fundamental basis of musical training is to provide students with thorough music-theoretical knowledge, the development of musicological competencies of various types and contents. A significant part of the program of training musicians in higher educational institutions of Ukraine covers music-theoretical and music-historical disciplines, the study of which is aimed at the establishment and development of artistic worldview, holistic musical and creative thinking of students and contributes to their full knowledge of various musical phenomena. These disciplines belong to the field of humanities and play an important role in shaping the future professional musician, creating a basis for the education and development of their creative personality. Music-theoretical and music-historical disciplines form a separate block, which is integrated into the cycle of professional disciplines. First of all, it is "Music Theory", "Solfeggio", "Harmony", "Polyphony", "Analysis of Musical Works", "History of World Music", and "History of Ukrainian Music" in the study of music-theoretical and music-historical disciplines. The basis for the application of innovative technologies in the study of these disciplines is the achievements of musical culture of Western Ukraine in the late 19th – first third of the 20th century, when the foundations of its professionalism, national significance

were developed. It is represented by various genres and different styles of composers of excellent creative scale: Mykhailo Verbytskyi, Anatol Vakhnianyn, Henrikh Topolnytskyi, Yaroslav Lopatynskyi, Yaroslav Yaroslavenko, Nestor and Ostap Nyzhankivskyi, Vasyl Bezkorovainyi, Stanislav Liudkevych, Denys Sichynskyi, Mykola Kolessa, Vasyl Barnivskyi.

The study presents the use of such technologies and techniques in the educational process of high school, such as: concise presentation to each topic (MS PowerPoint), interactive posters (for example, when considering works of major genres and forms such as cantata, symphony, or opera) with web services Glogster, Padlet, and extensive use of multimedia content, testing on the MOODLE platform using different types of tasks, conducting a music quiz (recognizing works by identifying their authors, part or specific topic of a great work), online testing system, discussions, webinars, use of digital piano, creation of virtual choirs, electronic textbooks, training books, repertoire collections that provide students with musical-theoretical material and scores of choral works of composers of the period, the use of technological techniques of coaching in music lessons – thematic educational projects as a basic form of practical training. All of them diversify the educational process, correspond to the level of modern informed youth environment, promote the development of artistic, historical, and creative thinking of students, encourage teachers to improve.

Innovative technologies in the study of music theoretical and music historical disciplines

Particular attention in the training of musicians should be paid to mastering the best examples of national music, which will help to expand knowledge about the national cultural heritage. In this context, the discipline "History of Ukrainian Music" is important, it provides a clear idea of the main stages of establishment and development of national Ukrainian musical culture in general and at the local and regional level in particular, provides an understanding of the systemic connection of all components of culture – art, ethnography, material culture, scientific knowledge, all forms of spiritual values, forms a worldview. The purpose of teaching the discipline "History of Ukrainian Music" is to consistently cover the great historical path that Ukrainian musical culture has gone through many centuries of its existence in accordance with the socio-political and cultural-artistic processes. This discipline is a multidisciplinary course of integrated nature, includes various aspects of national musical culture, among which a special place is occupied by musical regionalism (PORTNOVA; PORTNOVA, 2019).

In the context of "History of Ukrainian Music", the musical culture of the region of Western Ukraine is studied, which is represented by the works of composers of different

creative scale: M. Verbytskyi, A. Vakhnianyn, H. Topolnytskyi, M. Lopatynskyi, Ya. Yaroslavenko, Nestor and Ostap Nyzhankivskyi, V. Bezkorovainyi, S. Liudkevych, D. Sichynskyi, M. Kolessa, V. Barvinskyi (KYIANOVSKA, 2007; ROMANIUK; CHEREPANYN, 2016; KYIANOVSKA, 2000; NOVOSIADLA, 2020). As a result of studying students should know: features of establishment and development of musical culture of Western Ukraine against the background of social and historical conditions; patterns of development of musical culture in connection with other arts; distinctive features of the regional-national school of composition; ideological and aesthetic views of representatives of Western Ukrainian musical art and their reflection in art and culture; evolution of the main musical genres of Western Ukrainian professional musical art. Students will be able to: freely possess theoretical material on relevant topics, supplementing the answer with illustrations of musical works; to determine the genre and style features of the composers' work in connection with a particular historical period, folk traditions, European and world trends etc.; analyze musical works, determining the patterns of figurative content and features of its embodiment in the entire set of formative and expressive means; to highlight the key moments of musical drama in a musical work; illustrate with voice and piano fragments from operas, symphonies, piano and vocal works (PORTNOVA, 2019; DOLAKOVA et al., 2018).

In the process of studying the musical culture of Western Ukraine, certain pedagogical traditions have been developed for a long time, but currently there is a need for new approaches that are in tune with modern realities. The information field, modern computer technologies and special software are actively introduced in the training course "History of Ukrainian Music". The use of multimedia equipment in the process of studying the work of Western Ukrainian composers, namely projection screens, projectors, laptops or tablets, contributes to greater clarity, efficiency of learning, and pre-designed presentation allows for optimal time management (DOROFIEIEVA, 2018). The multifunctionality of the computer, the multiplicity and variety of applications it offers, have made it an important interactive tool for teaching music theory and music history disciplines (GOLUB *et al.*, 2019; SKYDAN *et al.*, 2019).

Based on practical experience of the authors of this study, certain aspects of the application of technologies can be noted, the use of which may be appropriate in the study of musical culture of Western Ukraine and the works of prominent composers. In general, they come down to three main aspects: 1) improvement of the understanding of the teacher and students about the material under study; 2) technical support for performance control; 3) organization of creative forms of work. They can be widely used in the teaching of the entire complex of disciplines of the music-theoretical cycle. The development of musicological

competencies by means of multimedia technologies should be ensured by compliance with such principles of teaching as the principle of informatization of education; the principle of clarity made by multimedia; the principle of optimal choice of teaching aids; the principle of combining traditional teaching methods and innovative multimedia technologies; the principle of purposeful interaction between teacher and students; the principle of intensification of musical and creative activity, encouragement to creative self-expression. Notably, the defined principles need to be applied comprehensively, which will help increase the effectiveness of educational quality outcomes (BOEVA-OMELECHKO *et al.*, 2019; BUROVA; USATENKO, 2020).

When studying the history of music, it is important to synthesize verbal, visual, sound and graphic information, combine abstract-logical and subject-image forms of visualization, increase learning motivation due to the unity of emotionality and imagery of the multimedia form of teaching material. Multimedia teaching aids can also be widely used in the distance learning course "History of Ukrainian Music", which is becoming very relevant nowadays (VINICHENKO *et al.*, 2018b; GALIMULLINA *et al.*, 2020).

Lecture material on the regional history of Western Ukrainian music, which touches on its stages of development in the context of socio-historical realities, genre and style diversity and creativity of leading composers (S. Liudkevych, D. Sichynskyi, V. Barvinskyi, M. Kolessa, etc.) is filled with visual information (reproductions of works of fine art, portraits of musical figures, photographs etc.) and audio or video fragments of musical works (choral, chamber-instrumental, chamber-vocal, symphonic, opera) performed by the best musical groups and soloists. To illustrate the historical and theoretical provisions on the above issues of the lecture course, it is important to create a concise presentation on each topic (MS PowerPoint), as well as interactive posters (for example, when considering works of major genres and forms, such as cantata, symphony or opera) Glogster, Padlet services with extensive use of multimedia content. From the initial stage of study, students should be informed about professionally designed sites that contain reference material on the history of music, a collection of music and sound recordings (mostly YouTube) (MUKHAMETSHINA et al., 2020).

Students are invited to involve multimedia content in independent work tasks. Like teacher lectures, student reports and learning projects should be accompanied by presentations, the technical level of which also needs to be discussed and evaluated. In particular, studying the works of S. Liudkevych, D. Sichynskyi, V. Barvinskyi as an independent work, students are invited to work on a number of tasks and questions for self-control. For example: to determine the leading areas of activity of the composer; features of individual compositional

style; to formulate the ideological and figurative concept of one of the composer's cantatas or symphonies; highlight the features of the structure and drama of the cantata, symphony or opera of the composer; to review the genre palette of vocal and choral compositions of large and small forms; to describe traditions and innovations in the genre of Western Ukrainian solo singing (romance) etc. At the same time, it is necessary to create a presentation of creative portraits of the above-mentioned composers, multimedia chronological tables etc. The implementation of these tasks is ensured by the use of modern Internet resources (HAVRILOVA, 2017; BUROVA et al., 2020).

The control over the level of mastering the key knowledge acquired during the study of the lecture course on the topics of the history of Western Ukrainian music can be carried out in the form of testing on the MOODLE platform using test tasks of different types. Testing the development of skills of listening to music and recognizing the studied musical works of S. Liudkevych, D. Sichynskyi, V. Barvinskyi by ear involves a music quiz (recognition of works with the definition of their authors, part or specific theme of a great work). Quizzes are predesigned using the capabilities of the module "Test" of the MOODLE platform in two versions: a) closed-ended tasks (listen to a piece of music and choose the correct answer from those offered); b) open-ended task (after listening to a fragment of a musical work, the answer should be written in the space provided, indicating the author, title of the work and section, opera act, part of a symphony, part, theme etc.). Computer technology can accelerate the control of theoretical knowledge of students via an online testing system. Verification of results can be instantaneous and free up time for lesson planning. It is quite possible to involve multimedia and software installed on mobile devices (phones, tablets, and laptops) in the context of studying disciplines such as "Music theory", "Harmony", "Analysis of musical works". During the mastering of these courses, material on the history of world and national (in particular, Western Ukrainian) classical music is widely involved. Thus, in the process of working on harmonic analysis students are invited to listen to audio or watch video recording (this can be done in a group, or individually, via personal phones, tablets, laptops, using headphones) of small works by S. Liudkevych, D. Sichynskyi, V. Barvinskyi (piano miniatures, choirs). After that it is necessary to make the harmonious analysis of these works on musical material (in a paper or multimedia variant). A similar technique can be used in the training course "Analysis of musical works", where upon considering the evolution of the genre and form of cantata students are offered two works of this genre by S. Liudkevych (cantata "Testament" and cantatasymphony "Caucasus") and cantatas by D. Sichinsky "Dnieper roars" for comparison and music-theoretical analysis.

Innovative technologies in the study of profile disciplines

Personality-oriented approach in the organization of the course "Piano as the Major Instrument" provides a variety of forms, methods, and technologies aimed at fulfilling the spiritual and creative potential of students, their ability to creative self-fulfillment in future pedagogical activities – music teacher in high school and music mentor in preschool educational institutions. Teaching the discipline has a well-established tradition, developed by centuries of experience. However, the challenges of time dictate their rules, and work on the repertoire requires a qualitatively new approach. The innovative nature of education, which currently is one of the key principles of training future musicians and teachers, has determined the specifics of the trajectory of the discipline. It is a combination of two strategies – traditional and innovative, namely: in the classroom the problem of introducing innovative technologies is solved by using such methods and forms of work with students that update the traditional process of learning, skills, increase its efficiency, educate creatively, active attitude to learning, contribute to better preparation for independent professional activity (DAUS; YUDAEV, 2016; BUROVA; KABAKOV, 2020).

The compositions of Western Ukrainian artists of the end of the 19th – the first third of the 20th century, which constitute the national cultural heritage, occupy an important place in the genre and variety of piano pedagogical literature. They include works written for music for home use, and the first examples of professional Ukrainian piano music (D. Sichynskyi, S. Liudkevych, V. Barvinskyi, N. Nyzhankivskyi, V. Bezkorovainyi etc.). In the early 1990's, after the proclamation of the Independence of Ukraine, interest in the music of these composers started to grow rapidly (NOVOSIADLA, 2011). However, at present, unfortunately, there is a trend when their works is used less and less in the program repertoire. Obviously, the reason for this is the appearance of a considerable number of modern compositions that meet the tastes of the current young generation and demonstrate original findings in the field of musical language (unusual harmonic combinations, technical and timbre effects etc.).

The use of innovations can solve the problem and breathe new life into the old compositions of Ukrainian artists. In particular, this refers to the possibilities of interactive learning. The interactive approach involves, apart from the conventional lesson of the student with the teacher, the use of other forms: student work in pairs, group assignments (debates and webinars, where students share knowledge and thus teach each other, exploratory and creative activities). Notably, group learning in the piano class, where traditionally priority was given to

individual lessons, is a new, extremely effective method that has successfully proven itself in European and American music institutions (LI, 2018; YUDAEV *et al.*, 2018). The emphasis in the role of the teacher shifted from the leader to the mentor, and students have the opportunity to work collectively on the task, following the instructions of the teacher. Collective work based on cooperation motivates students to study more, develops creativity, critical thinking, encourages free expression of personal opinion etc. (WAGNER *et al.*, 2020).

The inclusion of piano works by D. Sichynskyi, Ya. Lopatynskyi, V. Bezkorovainyi in the educational repertoire of students has didactic significance not only for the development of piano skills, but also for the improvement of their theoretical knowledge. The creative and research task for students is to find information about the life and works of the composer, as well as to analyze the play independently. To better understand the form and content of a piano work, the method of verbal interpretation of the musical image is used, which promotes the development of students' figurative thinking, the ability to vividly and convincingly convey personal ideas about the musical work. As a result of the completed task – discussions, webinars, where students share the results of their work in the form of a presentation (online or offline). Illustrative material can be "Arkan" by Ya. Lopatynskyi, "Concert Mazurka" by D. Sichynskyi, "Memories from the Mountains" ("Dumka" and kolomyikas) by V. Bezkorovainyi etc. Furthermore, it is possible to present fewer complex pieces from children's repertoire (collections of V. Bezkorovainy, V. Barvinskyi, N. Nyzhankivskyi etc.) in the form of a storyconversation (as a fragment of a lesson in music art with students), thus mastering practical skills of the future profession.

An effective form of developmental learning for pianist students is reading from notes. It is worth mentioning the now forgotten tradition of home music making, when the performance of works of song and dance genres prima vista brought not only aesthetic pleasure, but also was useful in the development of prima vista performance skills. For this purpose, it is proposed to use arrangements of Ukrainian folk songs and dance pieces by D. Sichynskyi and V. Bezkorovainyi, which are written on familiar intonation material, with a convenient pianistic texture and simple technical tasks. The use of these works improves the reading of notes, and also helps to form the repertoire of the future music educator of the preschool, because such folk dances as hopak, kozachok, kolomyyka or Western European – waltz, polka, mazurka – can be actively used in music lessons with preschoolers (OSTENDA *et al.*, 2018).

Forms and methods of interactive learning are especially intensively used during quarantine, when classes are conducted remotely. The transition to distance learning promotes greater independence of students; therefore, when studying the works of the aforementioned

composers, students can display their creative imagination and improvisation skills, competing in pairs with each other. The capabilities of the digital piano will help each student to unleash their creative potential and give the work a new original sound. The creative idea can be fulfilled by changing the timbre, style of the work, using homophonic-harmonic accompaniment as a "backing track" to sing the melody. In particular, interesting coloristic and stylistic experiments can be embodied in the arrangements of Ukrainian carols by D. Sichynskyi, V. Barvinskyi, V. Bezkorovainy, changing the piano sound to organ-choral, orchestral or vocal or adding various effects (such as the bell effect for using the tone of the vibraphone, etc.).

An important component in the study of the profile disciplines "Choral Conducting" and "Choral Class" in higher education institutions is the choral compositional heritage of Galicia in the late 19th – early 20th century (V. Matiuk, A. Vakhnianyn, I. Vorobkevych, O. Nyzhankivskyi, D. Sichynskyi, H. Topolnytskyi, P. Bazhanskyi, M. Lopatynskyj, Y. Kyshakevych, Ya. Yaroslavenko). Liturgical music occupies a prominent place in it, because the Galician musical culture of that period was created by authors-priests who perfectly knew the religious rites and needs of the church. These are choral works for all church ranks, accompanied by singing and meeting canonical requirements: liturgical cycles, weddings, memorial services, numerous arrangements of church songs for the choir, songs and hymns in honor of the saints and for each holiday based on regional church singing traditions. In secular choral work, composers turn to numerous adaptations of folk songs, create compositions for poetic texts of famous Ukrainian artists of different eras, in particular, T. Shevchenko, Lesia Ukrainka, O. Oles, Yu. Fedkovych, V. Chaichenko, K. Malytska, S. Rudanskyi. The aesthetic compositional principles that developed in the 19th century contributed to the emergence of a new school of composition, represented by S. Liudkevych, V. Barvinskyi, N. Nyzhankivskyi, in which national traditions are combined with new aesthetic trends of the early 20th century. The Galician musical culture of that time was described by the rapid development of professionalism in all spheres and directions of art. L. Kyianovska emphasized that the work of composers who approved themselves at the specified time, "allows to outline as one of the culminating points in the artistic history of the region" (KYIANOVSKA, 2007). The creative heritage of Galician composers has played an important part in the artistic life of the past and present not only in the western region, but also in Ukraine, it is important for the revival of spiritual culture of the Ukrainian state, defining cultural, artistic and national priorities in pedagogy and music education. Works by composers of a certain period are included in the repertoire of student choirs, programmes on individual choral conducting. This allows students to generalize the creative achievements of the composer's generation, use the best examples to

be able to analyze the general features of choral culture in the region at the turn of the 19th-20th centuries (BODROVA *et al.*, 2020; VINICHENKO *et al.*, 2018a).

According to modern requirements, there is an active search for innovative pedagogical and computer technologies, which allows to optimize the educational process, make it effective and modern, combining traditional forms of music education and performance with the capabilities of computer technology. One of the innovative areas of work is the creation of electronic textbooks, manuals, repertoire collections, which provide students with musictheoretical material and scores of choral works of composers of this period. This increases the possibility of possession of music-theoretical information and knowledge of the choral repertoire of composers of the region, which has a positive effect on the development of musicinformation competence of the future teacher of music. Performance by choirs of works of these composers requires interesting and creative searches and initiatives which can be diversified with application of receptions of various kinds of art, use of national traditional instruments, choreography, multimedia, unconventional placement of choral collective, creation of computer art projects, virtual choirs, when special programmes are used to collect the individual records of participants in one general image and combine them into a common joint performance. Such intensive use of regional choral traditions in the author's performing art facilitates their promotion by all available modern performing means. Involvement of student youth in choral art at the present stage through innovative means of teaching and education allows to improve their cultural and educational level, to ensure the unity of art education with the achievements of the past and its modern vision, to develop their general and spiritual potential aimed at preserving and increasing Ukrainian national traditions (BEKETOVA et al., 2020).

In the 21st century, coach technology is increasingly used to help people learn new skills and achieve significant success. Coaching is developing in several areas: personal, professional, corporate, and business coaching. Therewith, despite some similarities with other types of training, it occupies a separate place in this system and belongs to non-standard, creative teaching methods. Coaching (English – to teach, inspire, train for special purposes, prepare for certain tasks) is understood as a system of principles and techniques that promote the development of personal potential, as well as ensure maximum disclosure and effective fulfilment of this potential. The main task of coaching is to facilitate the adoption and implementation of conscious and responsible decisions on problematic issues. American researchers J. Renton (2009) and P. Chakreversi (2011) define coaching as a method of consulting and training (fragment of training), claiming its focus on clearly defined goals.

Pedagogical coaching is a new concept not only in music education, but also in music culture, as it is conducted based on an interdisciplinary approach with the use of a fundamentally important function of educational and cognitive activities — motivation. Coaching is, first of all, a tool to increase the personal effectiveness of both teacher and student. This term combines two different areas that have much in common, but still differ from each other. The first area is interpreted as a management style in the group and involves a special relationship between teachers and students. The role of the coach (the one who guides) here is performed by the teachers themselves. The purpose of such coaching is to increase the effectiveness of student learning. Another area is executive coaching, which is especially popular as a method of individual work with teachers. It is believed that the coach helps to understand why the teacher is ineffective, and therefore finds opportunities for development for the teacher (LIU *et al.*, 2020).

Among the technological methods of coaching in music lessons, thematic educational projects will be expedient as a basic form of practical training. The purpose of this project is to create a space for independent action of students, providing understanding and individual mastery of concepts and performance techniques, theoretical and practical methodological knowledge of music. Coaching is not aimed at analyzing problems and difficulties, but at finding solutions and improving professional performance. Basically, coaching is conducted in the form of a dialogue between teacher and student. The latter requires that the student have desire to work on their goals. Here the task of the teacher-coach is to competently build the problem, to push for ways to solve it, to organize monitoring and final control and ways to create motivation in the process. Thus, the main purpose of the creative pedagogical method that is coaching – to help the student or teacher to find a solution to the problem. A distinctive feature of coaching is that the coach helps the student to find an original, personal solution, rather than solving the problem for them. Coach technology can be used in the study of any musical subject.

Conclusions

Thus, the study highlights some aspects of the use of multimedia technologies, interactive learning and coach technology, the use of which is mainstreamed in the educational process of modern higher education and may be appropriate in the study of the musical culture of Western Ukraine and the works of outstanding composers of this region at the end of 19th – first third of 20th centuries in art specialties. In general, they come down to three main aspects: 1) improvement of the understanding of the teacher and students about the material under study;

2) technical support for performance control; 3) organization of creative forms of work. They should be widely used in the teaching of the entire complex of musical disciplines in high school.

During the study of music-theoretical disciplines with students they synthesize verbal, visual, sound, and graphic information, combine abstract-logical and subject-image forms of visualization, increase learning motivation due to the unity of emotionality and imagery of the multimedia form of teaching material. During the study of profiling musical subjects (in particular, a special instrument – piano) the role of students' independent work, their self-control increases, personality-oriented and interactive approaches are used in the organization of the course, creative research tasks are offered using the method of verbal interpretation of musical image. Forms and methods of interactive learning are especially intensively used during quarantine associated with the coronavirus pandemic, when classes are conducted in a distance form.

It is substantiated that the use of multimedia technologies, interactive learning and coaching technology in the study of music-theoretical, music-historical and profile disciplines, new methods and forms of work on works by Western Ukrainian composers of the late 19th – first third of the 20th century in piano, choral conducting, and choir class diversifies the educational process and corresponds to the level of modern informed youth environment, and reliance in the study of these disciplines on the works of national composers, in particular the Western region, makes it more accessible and easier to perceive, enriches students' worldviews, promotes artistic history and creative thinking, a broad humanitarian approach to the subject of study, understanding the artistic specifics of musical art, its place in the general social process, helps to improve the erudition of students, the development of their initiative, the development of qualities necessary for an independent practical activity as a musician, music teacher, and music educator of a preschool educational institution.

REFERENCES

ALLALYEV, R.M. Religious origins of the rule of law conception in the United States. **Amazonia Investiga,** v. 7, n. 14, pp. 212-217, 2019.

BEKETOVA, E.; LEONTYEVA, I.; ZUBANOVA, S.; GRYAZNUKHIN, A.; MOVCHUN, V. Creating an optimal environment for distance learning in higher education: discovering leadership issues. **Palgrave Communications**, v. 6, n. 1, pp. 66, 2020.

BEREHOVA, O.M. Communication in the socio-cultural space of Ukraine: technology or creativity? Kyiv: P.I. Tchaikovskyi NMAU, 2006.

BODROVA, T.; ZUBANOVA, S.; KRUCHKOVICH, S. Texts of various genres as the methodological basis of the subtest "reading" of the first certification level of the RSL exam. **Revista Inclusiones,** v. 7, pp. 124-136, 2020.

BOEVA-OMELECHKO, N.B.; POSTERNYAK, K.P.; ZHELTUKHINA, M.R.; PONOMARENKO, E.B.; TALYBINA, E.V.; KALLIOPIN, A.K.; OVSYANNIKOVA, M.N. Two images of Russia in the British political mass media discourse of 1991 – 1993 and 2013 – 2019: pragmastylistic aspect. **Online Journal of Communication and Media Technologies,** v. 9, n. 4, e201926, 2019.

BRYCH, V., NAHARA, M. Methodological principles of coaching development in Ukraine. **Ukraine: Aspects of Work**, v. 6, 18-23, 2009.

BUROVA, A.YU. Digital signal processing without performing arithmetic multiplication operations. **Amazonia Investiga,** v. 9, n. 25, pp. 200-205, 2020.

BUROVA, A.YU.; KABAKOV, V.V. "Unerroric" of multistage discrete Fourier transform of digital signal without arithmetic operations of multiplication. **Amazonia Investiga**, v. 9, n. 25, pp. 429-437, 2020.

BUROVA, A.YU.; USATENKO, T.O. Digital algorithms for the discrete frequency selection of signals that do not use algorithmic multiplication operations. **TEM Journal-Technology Education Management Informatics**, v. 9, n. 2, pp. 501-506, 2020.

CHAKRAVARTHY, P. The difference between coaching and mentoring. **Forbes**, 2011. Available in: https://www.forbes.com/sites/infosys/2011/12/20/business-leadership-forsmarter-org-2/?sh=5c5666b04d9e. Access on: 13 May 2021.

DAUS, YU.V.; YUDAEV, I.V. Designing of software for determining optimal tilt angle of photovoltaic panels. **International Conference on Education, Management and Applied Social Science (EMASS),** v. 1, pp. 1-10, 2016.

DOLAKOVA, M.I.; ZUBANOVA, S.G.; PASHENTSEV, D.A. The legal basis for the implementation of the financial policy of the state in the Russian Empire of the second half of the 19th century. **Vestnik of Saint Petersburg University-Law-Vestnik Sankt-Peterburgskogo Universiteta-Pravo**, v. 9, n. 4, pp. 452-466, 2018.

DOROFIEIEVA, V.Yu. Music-theoretical disciplines in the modern artistic paradigm: traditions and innovations. **Young scientist**, v. 2, n. 2, pp. 505-508, 2018.

GALIMULLINA, A.F.; SKVORTSOV, A.E.; NURGALI, K.R.; IBRAGIMOV, M.I. The artistic embodiment of the image of Kazan in the works of modern Russian and Tatar poets. **Laplage Em Revista**, v. 6, pp. 169-174, 2020.

GOLUB, G.A.; SKYDAN, O.V.; KUKHARETS, S.M.; MARUS, O.A. Substantiation of motion parameters of the substrate particles in the rotating digesters. **Inmatch-Agricultural Engineering,** v. 57, n. 1, pp. 179-186, 2019.

HAVRILOVA, L.H. The specifics of developing distance learning courses in music history. **Information technologies and teaching aids**, v. 58, n. 2, pp. 26-37, 2017.

KARAS, H. Organisation of the educational process in art schools in quarantine. Art education in the European socio-cultural space of the 21st century, 226-230. 2020.

KARAS, H.; SERHANIUK, L.; KAZYMYRIV, K.; BARDASHEVSKA, Y.; MASKOVYCH, T. Diaspora art project as a factor to protect Ukrainian music culture in the modern transformational processes. **Asia Life Sciences**, v. 22, n. 2, pp. 201-214. 2020.

KYIANOVSKA, L. Evolution of Galician musical culture of the 19th – 20th centuries. Ternopil: Aston, 2000.

KYIANOVSKA, L. Galician musical culture of the 19th-20th centuries. Chernivtsi: Knyhy-XXI, 2007.

LI, L. Study on the innovation of piano teaching in normal colleges and universities. **Creative Education**, v. 9, pp. 697-701, 2018.

LIU, Z.-YU.; SPITSYNA, N.; ZUBANOVA, S.; VEKILOVA, A. Using internet resources for remote language learning. **International Journal of Emerging Technologies in Learning**, v. 15, n. 13, pp. 22-33, 2020.

MUKHAMETSHINA, R.; NURGALI, K., ANANYEVA, S. An artistic landscape of the newest Kazahkstani novel. **Laplage Em Revista**, v. 6, pp. 149-154, 2020.

NAZARTSEVA, E.A.; MORYA, L.A.; ZUBANOVA, S.G. Teaching foreign students the vocation-related language. **Amazonia Investiga**, v. 8, n. 22, pp. 338-343, 2019.

NOVOSIADLA, I. Revived heritage of Ukrainian composers in the modern piano pedagogical repertoire. **General and specialised piano in the artistic space of Ukraine: scientific collections of M.V. Lysenko LNMA**, v. 27, pp. 363-371, 2011.

NOVOSIADLA, I. Information and computer technologies as pedagogical innovations in music education. *In*: ART CULTURE AND ART EDUCATION: TRADITIONS AND MODERNITY. **Materials of International Scientific and Creative Conference**. Kyiv, Ukraine, 2018. pp. 313-316.

NOVOSIADLA, I. Vasyl Bezkorovainyi is the son of the Ukrainian people. *In*: **V. Bezkorovainyi, Works for piano**. Kyiv, Ukraine. 2020. pp. 3-10.

NOVOSIADLA, I.; DUTCZAK, V. Collections of Christmas carols by Ukrainian Galician composers as examples of home amateur music-making repertoire. **Musica Galiciana**, v. XIV, pp. 296-304, 2014.

OBUKH, L. Coach technologies, trainings and master classes as components of music management in the socio-cultural space of Ukraine. **World Science International Academy Journal**, v. 6, pp. 43-46, 2018.

OSTENDA, A.; NESTORENKO, T.; ZHYHIR, A. What do students think of the education curriculum? Case of katowice school of technology. **International Relations 2018: Current Issues of World Economy and Politics, v. 1**, pp. 582-589, 2018.

PORTNOVA, I.; PORTNOVA, T. The importance of academic education in contemporary architectural and sculptural practice. **Journal of Mathematics and Computer Science,** v. 1, pp. 518-526, 2019.

PORTNOVA, T. Information technologies in art monuments educational management and the new cultural environment for art historian. **TEM Journal**, v. 8, n. 1, pp. 189-194, 2019.

PYLATIUK, I. General and specialised piano in the artistic space of Ukraine. Lviv: SPOLOM, 2012.

RENTON, J. **Coaching and mentoring**: What they are and how to make the most of them. New York: Bloomberg Press, 2009.

ROMANIUK, L.B. Features of the music-educational life of the Western Ukrainian lands (on the example of Stanislaviv of the end of the XIX – the first third of the XX centuries). *In*: **Modern culture studies and art history: an experience of Ukraine and EU**. Riga: Izdevniecība "Baltija Publishing", 2020. pp. 399-417.

ROMANIUK, L.B.; CHEREPANYN, M.V. **Musical and theatrical life of Stanislavov** (second half of the 19th – first half of the 20th century). Ivano-Frankivsk: Suprun V.P., 2016.

SKYDAN, O.; NYKOLYUK, O.; PYVOVAR, P.; MARTYNCHUK, I. Methodological approach to the evaluation of agricultural business system flexibility. **Management Theory and Studies for Rural Business and Infrastructure Development,** v. 41, n. 4, pp. 444-462, 2019.

TARAN, I.M.; VADASKA, T.S. Application of innovative teaching methods in piano lessons. *In*: L. Serhaniuk, J. Zvarychuk, M. Rudyk (Ed.). **Choral art in higher school: problems and prospects of professional training**. Ivano-Frankivsk: Lileia-NV, pp. 252-258, 2019.

VINICHENKO, M.V.; CHULANOVA, O.L.; KARACSONY, P.; BOGDAN, E.S.; MELNICHUK, A.V.; MAKUSHKIN, S.A. Model of competences of graduates of high schools of engineering directions: research of stakeholders. **Modern Journal of Language Teaching Methods,** v. 8, n. 3, pp. 369-380, 2018a.
VINICHENKO, M.V.; KARACSONY, P.; KIRILLOV, A.V.; OSEEV, A.A.; CHULANOVA, O.L.; MAKUSHKIN, S.A.; SHALASHNIKOVA, V.J. Influence of time management on the state of health of students and the quality of their life. **Modern Journal**

WAGNER, M.-N.L.; MAKUSHKIN, S.A.; GONCHAROV, V.V.; MAKSIMOVA, D.D.; SEKERIN, V.D.; GOROKHOVA, A.E. Regulation of the tourism industry to attract foreign investments at risk of force majeure events. **Laplage em Revista**, v. 6, pp. 299-306, 2020.

of Language Teaching Methods, v. 8, n. 5, pp. 166-184, 2018b.

YUDAEV, I.V.; DAUS, YU.V.; GAMAGA, V.V.; GRACHEV, S.E.; KULIGIN, V.S. Plant tissue sensitivity to electrical impulse. **Research Journal of Pharmaceutical Biological and Chemical Sciences**, v. 9, n. 4, pp. 734-739, 2018.

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