



Музична освіта і педагогіка

УДК 78.071.2:37.018.43

DOI <https://doi.org/10.5281/zenodo.17216125>

Формування естрадних виконавців в умовах інноваційних педагогічних практик і культурного активізму

Кдирова Інеш Осербаївна

заслужена артистка України, кандидат мистецтвознавства,

доцент кафедри «Музичне мистецтво естради»

КВЗО КОР «Академія мистецтв ім. Павла Чубинського» (Київ, Україна)

ORCID ID: <https://orcid.org/0000-0003-2717-904X>

Мирошніченко Олександр Миколайович

старший викладач кафедри «Мистецтво естради»

Казахського національного університету мистецтв імені Куляш Байсеітової
(Астана, Республіка Казахстан) ORCID ID: <https://orcid.org/0009-0003-2229-5102>

Прийнято: 15.09.2025 | Опубліковано: 27.09.2025

Анотація: Мета цього дослідження полягає у систематизації та аналізі сучасних наукових підходів до формування естрадних вокалістів за допомогою інноваційних педагогічних практик, а також у визначенні ключових напрямів інтеграції культурного активізму в освітній процес. У дослідженні розглянуто сучасні підходи до підготовки майбутніх співаків, що зосереджуються на використанні міждисциплінарних методик та вихованні громадянської відповідальності й патріотизму.

Методологія ґрунтується на застосуванні порівняльного та системного аналізу наукових джерел, які висвітлюють інноваційні педагогічні процеси в



естрадному вокалі з урахуванням міжнародного досвіду. Також використано методи синтезу для узагальнення сучасних підходів до модернізації вокальної освіти: інтерактивних технологій і цифрових інструментів, практик соціального та культурного активізму, що інтегруються в навчальний процес.

Аналіз виявляє основні наукові підходи та тенденції у викладанні естрадного співу: застосування цифрових технологій у формуванні сценічних навичок, розвиток емоційного інтелекту як ключового чинника виконавської майстерності, а також залучення студентів до соціально значущих мистецьких проєктів.

Новизна цього дослідження полягає у формулюванні системного підходу до виховання естрадних співаків. Підготовку вокаліста розглянуто як багатовимірний процес, у якому технічна досконалість і художня виразність тісно переплетені з вихованням громадянської свідомості.

У результаті естрадний виконавець постає професійним митцем, який є носієм культурної пам'яті Українського народу та передвісником соціальних змін. Дослідження також окреслює низку викликів, пов'язаних із впровадженням інновацій у систему вокальної освіти в умовах воєнного стану, як-от технічні обмеження, зокрема нерівний доступ до цифрових ресурсів. Важливими є й соціокультурні чинники, що спонукають студентів і викладачів до активістських практик, які підтримують ціннісні орієнтації суспільства. Подальші розвідки можна спрямувати на детальний аналіз ефективності конкретних інноваційних технологій у процесі підготовки естрадних співаків, а також на розробку методик оцінювання вокальних результатів і рівня залученості студентів до культурно-мистецької діяльності та активізму.

Ключові слова: *музичне мистецтво, естрадні виконавці, інноваційна педагогіка, культурний активізм, цифрові технології, громадянська свідомість, міждисциплінарність.*



Formation of Pop Performers in the Context of Innovative Pedagogical Practices and Cultural Activism

Inesh Kdyrova

Candidate of Study of Art (PhD), Associate Professor of the Department of Musical Popular Art Communal Higher Educational Establishment of Kyiv Regional Council

"Pavlo Chubynsky Academy of Arts (Kyiv, Ukraine)" ORCID ID:

<https://orcid.org/0000-0003-2717-904X>

Oleksandr Myroshnychenko

Senior Lecturer at the Department of Variety Art, «Kulyash Bayseyitova Kazakh National University of Arts» (Astana, Republic of Kazakhstan), ORCID ID:

<https://orcid.org/0009-0003-2229-5102>

Abstract: *The purpose of this study is to systematize and analyze modern scientific approaches to the formation of pop vocalists through innovative pedagogical practices, as well as to identify key directions for integrating cultural activism into the educational process. The research examines contemporary approaches to training future singers that focus on the use of interdisciplinary methodologies and on fostering civic responsibility and patriotism. The methodology is based on the application of comparative and systemic analysis of scholarly sources that highlight innovative pedagogical processes in pop vocal training, taking into account international experience. Methods of synthesis are also employed to consolidate contemporary approaches to the modernization of vocal education: from interactive technologies and digital tools to practices of social and cultural activism integrated into the educational process. The analysis reveals the main scientific approaches and trends in teaching pop singing: the application of digital technologies in developing stage performance skills, the cultivation of emotional intelligence as a key factor in artistic mastery, as*



well as the inclusion of students in socially significant artistic projects. International examples demonstrate that the combination of innovative methods and activist practices makes it possible to educate not only vocally trained, but also socially responsible performers. The novelty of this study lies in the formulation of a systematic approach to the education of pop singers. The preparation of a vocalist is conceptualized as a multidimensional process in which technical excellence and artistic expressiveness are closely interwoven with the cultivation of civic consciousness. As a result, the pop performer emerges not only as a professional artist but also as a bearer of the cultural memory of the Ukrainian people and a harbinger of social change. The study also outlines a number of challenges associated with the implementation of innovations in the system of vocal education under martial law, such as technical limitations, in particular unequal access to digital resources. Equally important are sociocultural factors that encourage students and teachers to engage in activist practices supporting the value orientations of society.

***Prospects for further research** include a detailed analysis of the effectiveness of specific innovative technologies (VR/AR, interactive platforms) in the process of training pop vocalists, as well as the development of methodologies for assessing both vocal achievements and the level of students' civic engagement through activism.*

***Keywords:** musical art, pop performers, innovative pedagogy, cultural activism, digital technologies, civic consciousness, interdisciplinarity.*

Introduction. The current stage of the development of arts education is marked by the active integration of digital technologies and innovative pedagogical practices, which are significantly transforming approaches to the formation of future pop performers. These changes are most evident in the field of pop singing, characterized by dynamism, the constant search for new forms of stage expression, and high levels of competition in the contemporary cultural sphere. Traditional teaching methods, based primarily on classical vocal schools, are gradually losing their relevance for a



generation of students oriented toward digital learning formats, multimedia resources, and individualized educational trajectories.

The relevance of this research lies in the fact that the training of a pop performer requires not only the development of vocal and technical skills but also the formation of complex competencies – stage mastery, creativity, intercultural communication, digital literacy, and an active civic stance. In today’s context, a performer must be capable not only of reproducing musical material but also of representing cultural memory and participating in socially significant projects.

The interdisciplinary approach to training pop vocalists combines elements of art studies, pedagogy, psychology, and cultural studies, aiming to create an effective model of the educational process. Within this framework, cultural activism gains particular importance as a component of education, serving as a means of cultivating civic awareness and social responsibility in future artists.

A key task is the systematization of innovative pedagogical practices and the analysis of their potential for modernizing the process of training professional performers, oriented toward the integration of artistic excellence with active participation in social and cultural life.

The relevance of the chosen topic is determined by the urgent need to develop a modern methodological framework for teaching pop singing that corresponds to the challenges of the digital era and contributes to the training of competitive performers.

The early 2020s have been marked by the rapid digitalization of arts education and the transformation of methodological approaches to training performers, particularly pop vocalists. In the international context, researchers emphasize the growing role of media platforms and audience participation as factors that reshape vocal and stage performance training through initiative-driven, network-oriented education [1]. Scholars note that the modern vocalist is being prepared not only for the stage but also for online presence: YouTube, TikTok, and Instagram have become new platforms for testing performance skills. Here, the audience functions not only as a



consumer but also as an active participant in the learning process, providing feedback, engaging in networked collaborations, and enabling crowdsourcing.

The educational process in music and vocal training has actively integrated online platforms (Zoom, Google Classroom, Moodle, as well as specialized DAWs and services such as Soundtrap and BandLab), leading to the emergence of new methods of preparing singers—distance-based masterclasses, video analysis of performances, and the use of VR/AR technologies for stage simulation [2, p. 388–395]. Cultural studies demonstrate that the pop stage has long transcended the boundaries of purely aesthetic training, increasingly integrating social-communicative competencies, media literacy, and self-presentation. Pop education is no longer limited to vocal technique: skills such as personal brand management and the ability to work with audiences across diverse cultures have become essential. This approach corresponds to global trends in integrating artistic and socio-communicative competencies [3, p. 124–144].

Within Ukrainian scholarly discourse, the understanding of the pop song has evolved – from genre and stylistic descriptions to the analysis of its sociocultural functions. Contemporary research directions include:

- pop song as a bearer of identity and social values [4];
- the interaction of pop with folklore and popular culture (historical, stylistic, and performative aspects) [5];
- postcolonial dimensions of the development of Ukrainian pop at the turn of the 20th–21st centuries [6, p.145–152].

In parallel, a field of scholarly research is developing that highlights artistic activism and the social role of music: from theoretical concepts of protest culture to empirical studies analyzing the impact of art practices on social attitudes and behavioral models of audiences. In this context, music is regarded not only as an aesthetic phenomenon but also as a tool for shaping public opinion, mobilizing communities, and articulating collective memory.



In particular, studies show that the pop song and vocal art in general can serve as a cultural mediator, transmitting humanistic values and initiating discussions around major social issues – war and peace, environmental challenges, and human rights, among others. Artistic activism in this sense becomes a form of pedagogical practice that influences the education of the younger generation, fostering critical thinking and the capacity for social responsibility [7].

From the perspective of vocal education, the integration of activist practices has a dual effect:

1. on the one hand, students master modern methods of communication with audiences, learning to engage with the public as a community that can participate in cultural and social change;
2. on the other hand, they develop the role of the performer-citizen, for whom art is a space not only for creative expression but also for social service.

Thus, artistic activism in the field of pop vocal performance can be understood as a strategic resource of cultural policy and educational practice, contributing to the training of a new generation of performers – artists who bring civic commitment into society through their professional mastery [8].

The results of the study are directly relevant to the pedagogy of pop singing, as they demonstrate the necessity of developing not only vocal-technical skills in students but also communicative, ethical, and civic competencies. It is the integration of these elements that ensures the preparation of a modern performer capable of responding to the challenges of the digital era and fulfilling a cultural and social mission.

At the same time, several methodological shortcomings can be outlined that delineate the research problem of this study:

1. *Fragmentary use of digital technologies*. While digitalization is actively addressed in general pedagogy (including DAW platforms, online studios, VR/AR stage modeling, gamification), within pop vocal training modules these resources are still implemented only sporadically. The majority of existing



research concentrates on broad strategies of digital education [1; 2], leaving the field of artistic training largely under-investigated.

2. *Absence of systematic evaluation of innovations.* Current studies often remain descriptive in nature; empirical assessment tools such as pre-/post-testing of vocal and stage competencies, or measurable criteria for evaluating performance mastery, are rarely applied. This limits the possibility of verifying the real impact of digital and interdisciplinary teaching practices.
3. *Weak integration of performance psychology.* Important aspects of training – overcoming stage anxiety, stimulating creativity, and developing skills of self-presentation – are usually studied in isolation from the cultural and interpretive dimensions of repertoire [6]. However, the effectiveness of vocal education depends on precisely such interdisciplinary integration of psychological, cultural, and pedagogical factors.
4. *Deficiency of research linking sociocultural functions of the pop song with teaching methods.* The interconnection between identity, activism, and inclusivity on the one hand, and formative assessment in the arts on the other, remains almost unexplored. This highlights the necessity of designing pedagogical tools that enable continuous monitoring of student development, not only during final examinations but also throughout the learning trajectory.

Thus, the current state of research demonstrates two key tendencies:

1. the presence of substantial cultural and social studies on pop music, along with work on artistic activism and educational digitalization;
2. simultaneously, the absence of a systematic pedagogical framework for teaching pop singing that would: a) integrate digital tools; b) take into account performance psychology; c) incorporate cultural narratives and the social mission of the pop song.



The model of training proposed in this article is aimed precisely at addressing these gaps by combining pedagogical innovations, cultural analysis, and activist practices to shape a new type of vocalist – both professional and citizen.

Methods. The study employs a set of complementary methods aimed at systematizing innovative pedagogical practices and integrating cultural activism into the training of pop vocalists.

Comparative and systemic analysis was used to examine different approaches to pop vocal pedagogy in both Ukrainian and international contexts. For example, the analysis of European and American educational programs demonstrates the systematic integration of interactive platforms (Zoom, Moodle, Google Classroom) and DAWs (Soundtrap, BandLab) into the learning process, whereas in Ukraine such tools are applied only sporadically [9, p. 273–281].

Methods of synthesis were applied to consolidate contemporary approaches to the modernization of vocal education. These include interactive technologies (video feedback, online masterclasses), digital tools (VR/AR stage simulation), as well as practices of social and cultural activism (student participation in charity concerts, intercultural festivals, community-based art initiatives) integrated into the educational process [10, p. 33–38].

A cultural studies methodology makes it possible to interpret the role of pop music and vocal art in society, combining pedagogical innovations with broader sociocultural missions – preserving identity, fostering civic engagement, and promoting intercultural dialogue. For example, case studies of performances of patriotic songs and socially oriented concerts illustrate how *artivism* can serve as an educational tool in the training of vocalists [11, p. 131–138].

Psychological and pedagogical approaches are applied to the study of performance psychology, including overcoming stage anxiety, developing emotional intelligence, and enhancing self-presentation skills. Practical methods include pre-



/post-testing of vocal and stage competencies, peer-assessment sessions, and reflective exercises to track student progress.

The analysis revealed the main scientific approaches and trends in teaching pop singing: the application of digital technologies in the development of stage performance skills, the cultivation of emotional intelligence as a key factor in artistic mastery, and the inclusion of students in socially significant artistic projects. International examples demonstrate that the combination of innovative methods and activist practices makes it possible to educate not only vocally trained but also socially responsible performers.

Analysis of Recent Research and Publications. In contemporary scholarly discourse, the issues of pop singing, innovative pedagogy, and cultural activism are examined from multiple perspectives – ranging from the sociocultural influence of popular music to the integration of digital technologies into the educational process.

The study by A. Burlaka [12] emphasizes the pop song as a medium for transmitting cultural identity, highlighting its role in preserving national memory. Similar conclusions are found in the works of Oronovsky, Tsap, and Oronovska [6], where the development of Ukrainian pop songs in the postcolonial period is analyzed. However, these studies lack a pedagogical dimension: specifically, how identity can be integrated into the training process of modern vocalists.

The work of Yu. Drabchuk [10] and the philosophical-anthropological studies of T. Lyutyi [4] explore the influence of mass culture on consciousness and the modifications of identity under conditions of medialization. Although these works are not recent, they provide a conceptual foundation for understanding the challenges faced by pop art in the digital era. More recent research (Kdyrova et al., 2025) [1] already emphasizes the combination of cultural and ethnic identity with media dynamics, but does not elaborate on the educational dimension.

Western scholarship actively engages with the phenomenon of artistic activism. For example, «*The Oxford Blue*» (2025) [8] examines the intersection of art and



activism, while E. Drott [7] proposes a conceptual shift from the study of protest music toward the broader field of “protest music studies.” At the same time, the Ukrainian context is underrepresented: there is a lack of studies analyzing pop singing as a tool of civic education and cultural diplomacy.

A number of studies demonstrate the integration of digital platforms into education. In particular, Al-Ansi et al. [2] analyze the development of VR/AR in education, while H. Hryhorenko [8] generalizes the experience of implementing immersive technologies in teacher training. Kdyrova [9] and Abuhassna [13] emphasize the role of distance learning and platforms such as Moodle, Zoom, and Google Classroom. However, most of these works focus on general education, leaving the specifics of arts education largely unaddressed.

Cherng and Davis [12] analyze multicultural reforms in pedagogy, which are relevant to the training of vocalists in a globalized environment. Redko [14] stresses the importance of drawing on international experience for the recovery of education under wartime conditions. Combined with the study by Dobrovolska [3], which views arts education as a tool for preserving cultural heritage, these approaches provide a methodological basis for the present research.

Research Tasks. The purpose of this article is to justify and systematize innovative pedagogical approaches to the training of pop vocalists in the context of educational digitalization and cultural activism, as well as to develop a conceptual model that integrates the technical, psychological, and socio-cultural components of performer preparation.

To achieve this purpose, the following research tasks have been defined:

1. Outline the theoretical foundations of pop singing as a multidimensional phenomenon that combines vocal-technical, emotional-psychological, and cultural components.



2. Analyze contemporary scholarly approaches to teaching pop singing in Ukraine and internationally, with particular attention to the experience of digitalizing arts education.
3. Identify gaps in previous studies, including the lack of empirical evaluations of innovative methodologies and the insufficient integration of artistic activism into the educational process.
4. Propose an innovative pedagogical model for the training of pop vocalists that combines digital technologies, performance psychology, and practices of cultural activism.
5. Substantiate the significance of cultural activism as a pedagogical practice capable of fostering civic awareness, critical thinking, and social responsibility among students.

Thus, the objectives of the article clearly reflect its relevance in both scientific and practical dimensions, define the logical structure of the research, and emphasize its novelty. The proposed approach makes it possible to consider pop singing not only as an artistic practice but also as a tool of social change and cultural diplomacy.

Research Results. Technologies with a wide range of innovative tools are actively transforming arts education, particularly the field of teaching pop singing. They have become a key element in the modernization of educational programs, as they allow the optimization of the learning process, making it more interactive and personalized, increasing the efficiency of knowledge acquisition, and providing access to educational resources in real time.

In the practice of training vocalists, digital platforms for distance learning play a significant role. During the COVID-19 pandemic, Zoom (created in the USA in 2011) and Google Classroom (2014) became universal tools for vocal lessons. They were widely used in leading universities around the world—Stanford, Harvard, Berkeley—as well as in music schools and conservatories. For vocal students, these platforms helped



maintain the educational process and opened new formats of collaboration: virtual ensembles, joint recordings, and online master classes [10].

The state of war in Ukraine has become a powerful factor that fundamentally changed the organization of the educational process in the field of arts and music pedagogy. The educational system faced the need for rapid adaptation to new conditions, where digital technologies and distance formats became not the exception, but the rule.

Table 1. Risks and challenges of the educational process during martial law

1.	<i>Technical limitations</i>	Power outages and interruptions in internet connectivity reduce the stability of the educational process and complicate the organization of synchronous classes.
2.	<i>Decreased emotional resources</i>	The war increases anxiety levels among both teachers and students, affecting their productivity and psychological resilience.
3.	<i>Loss of traditional communication</i>	The limitation of face-to-face classes reduces opportunities for direct vocal interaction, ensemble practice, and stage experience.
4.	<i>Digital inequality</i>	Not all participants in the educational process have equal access to modern technologies and high-quality equipment for musical work.

Extraordinary living and learning conditions have accelerated processes of adaptation [13]. The rapid implementation of new technologies took place. The war became a catalyst for the widespread use of digital platforms (Zoom, Google Classroom, Moodle, Microsoft Teams), as well as specialized music services that had previously been used only to a limited extent. Mobility also increased, as students and teachers gained experience in learning and collaboration through remote formats, which contributed to the creation of international academic contacts and the attraction of foreign support.

The war in Ukraine has also prompted international solidarity. Numerous universities and art institutions across Europe and the world opened access to online courses, scholarships, and joint projects, thereby expanding the horizons of Ukrainian arts education. For example, the University of Music and Performing Arts Vienna (MDW) implements cooperation programs with Ukrainian students through the *Music*



and Minorities Research Center led by Professor Ursula Hemetek. The European Association of Conservatoires (AEC) launched the initiative *Safeguarding the Musical Heritage of Ukraine*, providing Ukrainian teachers and students with access to international seminars and webinars. The Royal College of Music in London offered free online courses for Ukrainian students as part of its wartime support. In addition, cultural institutions such as the Goethe-Institut and the British Council opened special scholarship programs for representatives of creative professions from Ukraine, positively influencing their involvement in international artistic networks.

Learning under wartime conditions has shaped a number of new competencies among students: adaptability skills, psychological resilience, and the ability to use innovative tools even in times of crisis.

In the current conditions of martial law, digital technologies have become both a means of preserving the educational process and a catalyst for developing new methodological solutions in the teaching of pop singing. Teachers are actively integrating online platforms (Zoom, Google Meet, Moodle, Soundtrap, BandLab) into their work with students in order to rehearse vocal parts remotely, carry out collective arrangements, and analyze performances. For example, the use of specialized applications for sound processing and recording enables students to immediately evaluate the timbral and dynamic features of their own voices. Online concerts and virtual vocal battles, which became widespread among students during the war, are shaping a new culture of stage practice and sustaining the motivation of young performers.

These examples of innovative approaches to teaching and learning allow us to argue that digital tools have compensated for the limitations of offline classes and opened up space for experimentation in pop performance: from creating cover versions in remote ensembles to implementing original projects on social media. Both the educational and creative experiences of students have improved. Despite the severe challenges faced by the Ukrainian population, martial law has highlighted the problems



and risks of the educational process and, at the same time, has stimulated the emergence of new strategies in teaching pop singing. The combination of innovative technologies with international support and the cultural mission of Ukrainian artists has shaped a paradigm of arts education in which crisis becomes a stimulus for development and renewal.

Table 2. The Impact of Martial Law on Innovative Pedagogical Practices

Aspect	Risks	Opportunities
Technical infrastructure	Power outages and unstable internet connectivity; lack of high-quality equipment for students and teachers.	Accelerated implementation of digital platforms; development of skills in using diverse technological solutions.
Psychological state	High levels of anxiety and emotional exhaustion among participants in the educational process.	Formation of resilience, ability to work under stress; integration of psychological support into the learning process.
Communication and interaction	Limitations in live vocal communication; loss of ensemble and stage practice.	Use of VR/AR technologies to simulate performances; development of remote collaboration formats.
Accessibility of education	Digital inequality: unequal access to resources and learning opportunities.	Mobility and flexibility: the ability to study from anywhere in the world; expansion of international educational ties.
International context	Dependence on external support may cause instability of educational programs.	International solidarity: access to online courses, grants, and support programs; integration into the global educational space.

Thus, innovative pedagogical practices in the training of future music teachers effectively compensate for the absence of face-to-face learning and open new opportunities for creative interaction. Particularly valuable for our topic is the emphasis on the fact that the distance format can serve as a foundation for innovations in teaching



pop singing. Kdyrova I. O. highlights the importance of interactivity and multimedia, which can make learning more dynamic and productive [7, p. 273–281]. The use of video analysis of students' performances, the organization of virtual master classes, and digital collaborations foster the development of self-reflection, stage expressiveness, and communicative competence. At the current stage, the distance model is gradually transforming from an “alternative option” into a full-fledged educational resource capable of supporting and even enhancing the quality of arts education.

In the field of music education, the blended learning model has proven to be effective, synthesizing live classroom performance with online formats. The term itself appeared in the 1990s in studies devoted to the introduction of computer technologies in education. The University of California, Berkeley, was among the first to apply it to musician training in the 2000s, and today it is actively used in Ukraine in pop singing courses. Blended Learning is especially relevant in pop singing, vocal ensemble, and arranging classes. Students can practice vocal skills in person with a teacher, while online they receive assignments in arranging, aural analysis, digital recording, or participation in virtual ensembles.

The effective practice of blended learning acquires particular importance under martial law, when air raid alerts and other emergencies can interrupt classes at any time. In such situations, the online format becomes an alternative, especially for group courses where large gatherings of students are avoided for safety reasons. A good example of a balanced Blended Learning system is the «Pavlo Chubynskyi Academy of Arts» in Kyiv, where distance and face-to-face formats are harmoniously integrated, ensuring both safety and continuity of the educational process even under extreme conditions.

Mobile learning, which spread in the 2010s, has also entered the practice of vocal education. Applications for ear training, voice development, and rhythm exercises (such as *EarMaster*, *Yousician*) are integrated into students' individual work,

expanding learning beyond the classroom. These digital platforms serve as effective tools that complement traditional teaching methods.

The *EarMaster* platform is designed for targeted development of musical hearing, rhythmic perception, and solfège skills. The software offers a wide range of interactive exercises, from interval and chord recognition to rhythmic dictations and vocal tasks with instant accuracy feedback. Through automated result analysis, students can correct intonation and rhythm in real time, building an individual trajectory of improvement. This approach is highly relevant for pop vocalists as it ensures systematic development of fundamental professional skills.

Another resource, *Yousician*, is aimed at a broader audience – from beginners to professional performers. Its distinctive feature is a gamified approach: a sequence of levels and tasks enhances student motivation. The program covers several areas – guitar, piano, bass, ukulele, and vocals. Using a microphone, *Yousician* provides immediate feedback on intonation and rhythm accuracy, allowing students to effectively adjust their performance. In the context of pop singing instruction, such independent training strengthens the development of vocal skills outside the classroom.

EarMaster functions as a platform with an emphasis on academic training and ear development, while *Yousician* aligns more with the requirements of popular music practice, oriented toward interactivity and wide audience engagement. Together, these resources form an integral system: the first provides fundamentality and depth in music-theoretical preparation, while the second ensures dynamism and motivation in daily vocal-instrumental practice.

The use of *EarMaster* and *Yousician* in training future pop performers supports the effectiveness of blended learning practices. They significantly supplement traditional teaching methods, open new opportunities for individualization of the continuous educational process, enhance creativity, and stimulate professional growth.

An important niche in contemporary vocal pedagogy is occupied by Artificial Intelligence (AI). It is used for personalized learning, assessing the quality of vocal



performance, and creating individual training programs for students. For example, experiments at Stanford and Edinburgh have shown that AI can evaluate intonation, timbre, and dynamics of singing, providing students with real-time recommendations.

AI is also employed as a tool for objective evaluation in vocal pedagogy. One illustrative example is the study by D. Huan (2024), dedicated to the creation of a system for objective analysis of vocal performance [14]. Huan demonstrated that AI can serve as an effective assistant in vocal pedagogy. Using methods of acoustic analysis – logarithmic Mel spectrum for extracting sound features, signal modeling, and radial basis function networks for assessment – the researcher developed a comprehensive system of performance quality control. This system is capable of analyzing three key parameters: intonation, rhythm, and timbre, ensuring high accuracy of results (95% for intonation, 93% for rhythm, and 89% for timbre).

AI is also considered as a tool for technical measurement and a methodological resource in teaching. First, students receive instant feedback on the quality of their singing. Second, teachers can objectively record the dynamics of students' progress, which allows them to design individualized training programs and avoid subjectivity in assessment. Third, the technology supports students' independent work, as it enables practice beyond the classroom.

We can state that Artificial Intelligence is gradually forming a new segment in vocal pedagogy, where digital technologies serve as a catalyst for qualitative change. While they certainly do not replace traditional instruction, they significantly complement it by providing objective criteria for analysis and fostering the development of professional skills. In our view, in the future such systems will become an integral part of the methodology for training both pop and classical singers, who must maintain a balance between creativity and precision, tradition and innovation.

In the context of digital transformation and global challenges, the experience of the Kulyash Bayseyitova Kazakh National University of Arts (Astana) deserves particular attention. The institution occupies a special place in the system of arts



education in Kazakhstan and Central Asia. As a leading center for the training of professional musicians, the university preserves the traditions of Kazakh vocal art while actively implementing modern pedagogical and digital practices, positioning itself as an important link in the global cultural and educational space.

During the COVID-19 pandemic, the university promptly introduced blended and distance learning formats. The use of platforms such as Zoom, Moodle, Microsoft Teams, as well as specialized music services (BandLab, Soundtrap), made it possible to continue the educational process without interruption and provide students with access to vocal lessons, master classes, and consultations. Vocal ensembles and solo performers were able to work on their repertoire online, while instructors offered feedback through audio and video performance analysis.

The Kulyash Bayseyitova Kazakh National University of Arts maintains active partnerships with European arts institutions. Joint online projects, as well as student and faculty participation in international seminars and exchange programs, foster new competencies such as stage mobility and cross-cultural communication. In the context of globalization and intercultural dialogue, vocal art gains particular significance as a means of preserving identity and serving cultural diplomacy.

Increasingly, the educational process incorporates psychological support for students, work on overcoming stage anxiety, and the development of self-presentation skills. A cultural analysis of vocal repertoire helps future performers approach the interpretation of national and world masterpieces with greater awareness [15].

Thus, the Kulyash Bayseyitova Kazakh National University of Arts represents a successful example of modern approaches that combine national traditions with innovative technologies in vocal education. It nurtures a new generation of performers who confidently master professional skills, preserve and develop Kazakh and world vocal heritage, and are capable of carrying cultural values into the international arena.

Conclusions. In contemporary Ukraine, technologies and digital tools have become indispensable elements of the educational process, particularly under martial



law. Although the crisis caused by the full-scale war has intensified the need to preserve the educational system, it has also accelerated the implementation of distance and blended learning formats. This applies not only to general secondary and higher education but also to specialized arts training, especially in the field of pop singing.

Digital platforms such as Zoom, Moodle, Google Classroom, and Microsoft Teams have become the main instruments of educational continuity. They provide the technical capability to organize online vocal lessons, master classes, teacher consultations, and individual voice training sessions. For students of artistic specialties, access to lectures is important, but the main focus lies in practice – singing, uploading backing tracks, recording their own performances, and receiving detailed feedback from instructors.

Arts universities in Ukraine and Kazakhstan already offer several examples of successful integration of innovative technologies:

- *National Music Academy of Ukraine named after P. I. Tchaikovsky (Kyiv)*: during air raids, classes were conducted online using Zoom and Google Meet to maintain the rhythm of the educational process even during evacuations to shelters.
- *«Pavlo Chubynskyi Academy of Arts» (Kyiv)*: adapted its classes to the blended learning format, introduced video lectures, and used digital recording platforms (BandLab, Soundtrap), which allowed students to complete practical assignments remotely.
- *Kyiv University of Culture and Arts*: developed digital courses in pop singing using interactive methods and videoconferencing for analyzing students' stage performances.
- *Kharkiv I. P. Kotlyarevsky National University of Arts*: despite shelling, continued vocalist training via Moodle and Microsoft Teams, where teachers created virtual classrooms for working on repertoire.



- «*Kulyash Bayseyitova Kazakh National University of Arts*» (Astana): implemented blended learning practices and actively integrated digital platforms for online rehearsals, vocal ensemble training, and international collaborations, ensuring continuity of education even under crisis conditions.

Beyond traditional platforms, specialized resources are actively used in arts education:

- *Online recording studios* (BandLab, Soundtrap), which enabled students to experiment with arranging and create original compositions.
- *Mobile applications* for ear and voice training (EarMaster, Vocal Pitch Monitor), which became important tools for independent work during isolation.
- *VR/AR technologies* for stage simulation, piloted in Ukrainian universities.

Particular importance has been attached to issues of psychological adaptation. Pop singing teachers – including Honored Artists and professors of leading Ukrainian universities – used online formats not only for instruction but also for psychological support of students under the difficult conditions of war. For example, faculty at the «Pavlo Chubynskyi Academy of Arts» and the Kyiv Municipal Academy of Pop and Circus Arts implemented individually oriented vocal lessons aimed at both voice training and emotional stabilization.

The analysis of contemporary approaches to teaching pop singing demonstrates that innovative pedagogical practices are gradually forming a new model of arts education, centered on the integration of digital technologies, psychological preparation, and cultural interpretation of repertoire. It has been found that modern pop singing instruction is built on an interdisciplinary basis, incorporating art studies, cultural, psychological, and digital components.

It is proven that digital platforms and innovative tools open new opportunities for interactive learning, remote collaboration, and students' creative self-realization. Under wartime conditions, these technologies have become the primary mechanism for



ensuring educational continuity. They have provided the possibility of maintaining communication and organizing the learning process even in emergency situations.

It has been clarified that the combination of psychological and cultural approaches helps overcome stage anxiety, develop confidence, and form students' ability to interpret pop songs as cultural texts. In wartime, psychological resilience and cultural self-reflection have become crucial factors in preserving the professional identity of future performers.

The advantages of integrating innovative methods into pop singing education include the individualization of learning, the development of digital and creative competencies, and increased accessibility of education. However, among the risks the following should be noted:

- dependence on technical resources and internet connectivity, which is especially critical during wartime;
- risk of reduced quality of “live” vocal interaction;
- emotional exhaustion of teachers and students due to the crisis context.

At the same time, the war itself has prompted the accelerated integration of innovations, which has become a catalyst for the development of new educational strategies. The practical results of students' work in digital formats have reached a high level. The experience of professional recording studios confirms the effectiveness of using digital technologies in the training of pop vocalists. Students of Ukrainian arts universities, who during the COVID-19 pandemic and under martial law in Ukraine were forced to work primarily in online formats, demonstrated significant progress in their professional development. As contemporary research shows, the formation of a vocalist's individual “sound” is based on technical, timbral, and articulatory features [16].

According to the testimony of leading Ukrainian sound engineer Oleksandr Fedorenko, it was precisely beginner singers who achieved impressive results after a relatively short period of individual training in digital environments. Recordings made



under studio conditions revealed acoustically higher-quality vocals, improved diction consensus, and greater accuracy of intonational reproduction of vocal works.

In this context, a striking example is the case of young Ukrainian singer Diana Taimanova, who during martial law created her own original project «*Songs from the Shelter*». She recorded her vocals independently, under conditions of restricted mobility and constant air raid alarms – literally in a storage closet adapted as an improvised studio [17]. Despite the lack of professional equipment, the results were remarkable in terms of acoustic quality, diction clarity, and intonational precision, which confirms the potential of modern digital tools in shaping professional competencies even under extraordinary circumstances.

Among the most accessible and mobile programs actively used by beginner singers to monitor their own singing and record audio and video, the following can be highlighted:

Soundtrap (an online DAW, convenient for collaborations and basic vocal recording);

BandLab (a free platform with the ability to create tracks and analyze recording quality);

Audacity (a classic tool for editing and analyzing vocals, still simple to use);

GarageBand (user-friendly for macOS and iOS, allowing work with intonation accuracy and arrangements);

Zoom and Google Meet (combined with recording functions) – as tools for quick performance analysis and interaction with the teacher.

The use of digital tools alongside traditional teaching methods contributes to the formation of a new type of vocal education: students can independently monitor their progress, carry out repeated performance analyses, and acquire studio-level skills already during their studies.

Thus, the results of the study confirmed that the development of innovative pedagogical practices in the field of pop singing is a key factor in preserving and



renewing arts education under conditions of social transformation. The integration of digital tools into the educational process, combined with psychological support and cultural analysis, has facilitated the creation of flexible educational models capable of adequately responding to the challenges of war. Such models shape a new generation of performers who not only master professional skills but also serve as carriers of Ukrainian cultural and artistic traditions in the international space.

References

1. Kdyrova I., Diakiv V., Koval O., Voitenko I. The role of cultural and ethnic identity in contemporary media dynamics: Market potential and influence. *Salud, Ciencia y Tecnología – Serie de Conferencias*. 2025. Vol. 4. Article 1459. DOI: <https://doi.org/10.56294/sctconf20251459>
2. Al-Ansi A., et al. Analyzing augmented reality (AR) and virtual reality (VR) recent development in education. *International Journal of Novel Research and Development*. 2023. Vol. 8, No. 10. P. 388–395. URL: <https://www.ijnrd.org/papers/IJNRD2310388.pdf>
3. Dobrovolska R., Kdyrova I., Demeshko N., Dossanova K., Martsenkivska O. Strategies for the preservation of cultural heritage through art and education: A comprehensive approach and evaluation of effectiveness. *International Journal on Culture, History, and Religion*. 2025. Vol. 7, No. 1. P. 124–144. DOI: <https://doi.org/10.63931/ijchr.v7i1.98>
4. Liutyi T. Modyfikatsii identychnosti v ukrainskii masovii kulturi (vypadok vplyvu mas-medii) [Modifications of identity in Ukrainian mass culture (the case of media influence)]. *Filosofsko-antropolohichni studii. Vyznachalni vymiry suchasnoho filosofsko-antropolohichnoho znannia*. Kyiv: Stylos. 2013. P. 171–187. [in Ukrainian]
5. Mozghovyi M. Stanovlennia i tendentsii rozvytku ukrainskoi estradnoi pisni [Formation and trends in the development of Ukrainian pop song]. Dissertation (Candidate of Art Studies, 17.00.01). Kyiv, 2007. 192 p. [in Ukrainian]



6. Oronovskyi A. I., Tsap H. V., Oronovska L. D. Okremi aspekty rozvytku ukrainskoi estradnoi pisni u postkolonialnyi period kintsia XX – pochatku XXI stolittia [Defined aspects of the development of Ukrainian pop song in the postcolonial period of the late 20th – early 21st century]. *Mystetstvoznavchi zapysky*. 2021. Issue 40. P. 145–152. DOI: <https://doi.org/10.32461/2226-2180.40.2021.250379> [in Ukrainian]
7. Drott E. From studies of protest music to protest music studies: Mapping a field that doesn't (yet) exist. *Music Research Annual*. 2023. No. 4. URL: <https://musicresearchannual.org/drott-protest-music-studies/>
8. The Oxford Blue. The intersection of art and activism. 2025. URL: <https://theoxfordblue.co.uk/the-intersection-of-art-and-activism> (accessed: 10.09.2025).
9. Kdyrova I. O., et al. Digital platforms in a distance learning environment: an educational trend or the need of the hour. *Journal of Curriculum and Teaching*. 2022. Vol. 11, No. 7. P. 273–281. DOI: <https://doi.org/10.5430/jct.v11n8p273>
10. Drabchuk Yu. P. Pop-kultura i yii vplyv na liudsku svidomist [Pop culture and its influence on human consciousness]. *Visnyk Mariupolskoho derzhavnoho universytetu. Seriiia: Filosofiia, kulturolohiia, sotsiolohiia*. 2013. Issue 6. P. 33–38. URL: http://nbuv.gov.ua/UJRN/Vmdu_fks_2013_6_8 [in Ukrainian]
11. Antypenko Yu. Yu., Levko V. I. Pisenna tvorchist ukrainskykh artystiv u period viiny v konteksti emotsiinoi vyraznosti mystetskoï refleksii [Song creativity of Ukrainian artists during the war in the context of artistic emotional expression]. *Ukrainska kultura: mynule, suchasne, shliakhy rozvytku*. 2024. Issue 49. P. 131–138. DOI: <https://doi.org/10.35619/ucpmk.v49i> [in Ukrainian]
12. Burlaka A. Suchasna ukrainska estradna pisnia yak zasib transliatsii kulturnoi identychnosti [Contemporary Ukrainian pop song as a means of transmitting cultural identity]. *Pytannia kulturolohii*. 2023. No. 41. P. 43–51. DOI: <https://doi.org/10.31866/2410-1311.41.2023.276688> [in Ukrainian]



13. Abuhassna H., et al. Development of a new model on utilizing online learning platforms to improve students' academic achievements and satisfaction. *International Journal of Educational Technology in Higher Education*. 2020. Vol. 17, No. 1. P. 1–23. DOI: <https://doi.org/10.1186/s41239-020-00216-z>
14. Redko K. Yu. Pisliavoienne vidnovlennia nauky ta osvity: uroky Yaponii, Kytaiu, SShA dlia Ukrainy [Post-war recovery of science and education: Lessons from Japan, China, USA for Ukraine]. *Investytsii: praktyka ta dosvid*. 2023. No. 21. P. 69–78. DOI: <https://doi.org/10.32702/2306-6814.2023.21.69> [in Ukrainian]
15. XIV-ši Boranbaev oqulary: is-äreketdegi üzliksiz körkemdik bilim berudiñ zamanaūi damūy [The XIV Boranbayev Readings: Modern development of lifelong art education in action]. *Materialy Mezhnarodnoyi naukovoprakticheskoyi konferentsiyi. Qazaq ul'tyq öner universiteti*. Astana: Bulatov A.Zh., 2025. 438 p. [in Kazakh and English].
16. Kishakevych S., Stets H. Saund yak individualna forma zvuchannia holosu [Sound as an individual form of vocal timbre]. *Mystetski obrii. Aktualni problemy mystetskoi osvity ta mystetstvoznavstva*. 2022. Issue 19. P. 120–130. DOI: <https://doi.org/10.24919/2308-4634.2022.259953> [in Ukrainian].
17. Taimanova D. Songs from the Shelter [Audio project]. Kyiv, 2022. URL: https://www.youtube.com/channel/UCBVG54hAnm_jelTaoDuvmWQ [in Ukrainian].