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EDUCATING UPCOMING ART INSTRUCTORS IN COMBINED TEACHING METHODS AT UNIVERSITY LEVEL

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SUMMARY. The relevance of the study is determined by the need to modernise the training of future art teachers through blended learning, which allows for an effective combination of traditional and digital technologies, taking into account modern educational requirements and the peculiarities of artistic activity. The study under scrutiny here sets out to highlight the specifics of the implementation of blended learning in the system of higher pedagogical education. In particular, it focuses on the role of this implementation in the formation of the professional competences of future art teachers. In this regard, the study involves analysing methodological approaches to the integration of digital tools into the educational process. Furthermore, it involves evaluating the effectiveness of combining online lectures and virtual master classes with practical work in art studios. In these studios, students have the opportunity to experiment with materials and translate theoretical knowledge into specific creative projects. The article provides a comprehensive overview of the factors that contribute to methodological competence in the context of blended learning. In particular, it emphasises

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the necessity of systematic enhancement of the quality of art education through the utilisation of contemporary digital platforms for the organisation of collaborative projects, the creation of interactive learning materials, and the application of innovative pedagogical approaches. The article proposes an integrated model of art teacher training that combines adaptive digital resources, online consultations with leading experts, interactive workshops that utilise artificial intelligence to analyse creative works, and individualised educational trajectories that consider each student's unique creative potential.

Keywords: art teacher, music teacher, visual arts teacher, teacher training, quality of education

1. Introduction

The modern system of higher pedagogical education is forced to adapt dynamically to new conditions and challenges, among which a unique role is played by the introduction of blended learning, which involves an organic combination of traditional teaching methods with the widespread use of digital technologies and online tools. In particular, the professional training of art teachers requires not only the qualitative mastery of the theoretical foundations of pedagogical and artistic activity but also the formation of practical skills of creative self-realisation, development of aesthetic worldview, mastery of modern artistic techniques, as well as the acquisition of professional skills in teaching art disciplines in schools and other educational institutions Grushka^{6.}

Expanding the possibilities of the educational process through the use of blended learning contributes to the individualisation of teaching approaches, the integration of innovative digital solutions into teaching, as well as the introduction of modern methods that allow students to master the material at their own pace and the development of professional competences of future specialists (art teacher, music teacher, visual arts teacher) Chernoivanenko⁷. In view of the aforementioned points, the study of the challenges and opportunities inherent in training future art teachers within the framework of blended learning is of the utmost importance. This is due to the fact that it facilitates the development of effective pedagogical strategies that not only take into account

⁶ Grushka, K., R. Buchanan, M. Whittington, and R. Davis. "Postdigital Possibilities and Impossibilities behind the Screen: Visual Arts Educators in Conversation about Online Learning and Real-World Experiences." Video Journal of Education and Pedagogy, vol. 7, no. 1, 2022, article 27. https://doi.org/10.1163/23644583-bja10027

Chernoivanenko, A. D. Academic Musical-Instrumental Art as a Subject of Musicological Systemology. Odesa: Helvetyka Publishing House, 2021.

the particularities of the contemporary educational process but also contribute to the enhancement of the professional training of future teachers. This, in turn, results in the acquisition of the necessary competences for the effective implementation of artistic and educational activities in the context of dynamic changes in education and culture.

2. Literature review

Scholars offer different approaches to the definition of blended learning. For example,⁸ consider blended learning as a combination of formal and informal learning methods, where traditional classroom instruction is supplemented by online communication via email and video conferencing. Bovill⁹ goes on to give a more structured definition, noting that blended learning includes 30% to 70% online components, while fully distance courses do not include any classroom sessions at all. The definition by Chust-Pérez¹⁰ focuses on the harmonious combination of formal and informal learning, the integration of online and offline interaction between the teacher and the student in the format of using blended learning.

Also, Istenič¹¹, based on the research of Anthony¹² characterises blended learning as a symbiosis of distance and face-to-face formats, where one of the components becomes dominant depending on the learning model. However, there is a problem of insufficient development of methodological foundations for choosing the optimal model, which necessitates further research.

⁸ Graham, C. R., S. Allen, and D. Ure. "Benefits and Challenges of Blended Learning Environments." *Encyclopedia of Information Science and Technology I–V*, edited by M. Khosrow-Pour, Idea Group Inc., 2005. http://dx.doi.org/10.4018/978-1-59140-553-5.ch047.

⁹ Bovill, C. "Co-creation in Learning and Teaching: The Case for a Whole-Class Approach in Higher Education." *Higher Education*, vol. 79, no. 1, 2020, pp. 1023–37. https://doi.org/10.1007/s10734-019-00453-w.

¹⁰ Chust-Pérez, V., R. P. Esteve-Faubel, M. P. Aparicio-Flores, and J. M. Esteve-Faubel. "Enhancing Visual and Plastic Education Training: A Blended Learning and Flipped Classroom Approach." *Journal of New Approaches in Educational Research*, vol. 13, 2024, article 11. https://doi.org/10.1007/s44322-024-00011-y.

¹¹ Istenič, A. "Blended Learning in Higher Education: The Integrated and Distributed Model and a Thematic Analysis." *Discover Education*, vol. 3, 2024, p. 165. https://doi.org/10.1007/s44217-024-00239-y.

¹² Anthony, B. Jr, A. Kamaludin, A. Romli, A. Farihan, D. Nincarean, A. A. Aziman, G. L. Ming, et al. "Exploring the Role of Blended Learning for Teaching and Learning Effectiveness in Higher Education Institutions: An Empirical Investigation." *Education and Information Technologies*, vol. 24, 2019, pp. 3433–66. https://doi.org/10.1007/s10639-019-09941-z.

Several researchers, Kalashnikova¹³, Mintii¹⁴, and Voitovych¹⁵, emphasise the significant advantages of blended learning, in particular: a) increasing the efficiency of the educational process; b) introducing personality-oriented and competence-based approaches: c) developing independent learning skills; d) developing critical thinking and research skills; e) expanding access to information resources; f) ensuring interactive interaction between participants in the educational process. At the same time, current research does not provide a sufficient answer to the question of the optimal balance between the face-to-face and distance components in art pedagogy. The search for models that will effectively develop the artistic, musical and theatrical competences of art teachers remains important.

The training of future art teachers requires special attention to the level of methodological competence of teachers, as they must not only be proficient in pedagogical technologies but also effectively use digital tools. In their comprehensive studies, Haluziak¹⁶ and Walzer¹⁷ emphasise that teacher readiness is the primary condition for the successful implementation of new methods. In turn, Lavnikov & Lesyk¹⁸ define readiness for professional activity as a complex phenomenon that combines motivation, socially significant qualities and professional skills. In turn, Rebukha¹⁹ and Zeitner²⁰ interpret the blended learning format as a process of integrating active methods into the structure

¹³ Kalashnikova, S., N. Bazelyuk, O. Bazelyuk, et al. *Improving Teaching in Higher Education: Theory and Practice*. Edited by S. Kalashnikova, Institute of Higher Education of the National Academy of Pedagogical Sciences of Ukraine, 2023. https://doi.org/10.31874/TE.2023.

Mintii, I. S. "Blended Learning for Teacher Training: Benefits, Challenges, and Recommendations." Educational Dimension, vol. 9, 2023, pp. 1–12. https://doi.org/10.31812/ed.581.

Voitovych, I. S., editor. Teacher Training for Professional Activity in Blended Learning Conditions. Lutsk: FOP Hadyak Zh. V., "Volynpolygraph" TM, 2024.

Walzer, D. "Considering Leadership Pedagogy in Creative Arts Education." *Journal of Leadership Education*, vol. 23, no. 1, 2024, pp. 91–107. https://doi.org/10.1108/JOLE-01-2024-0024.

¹⁶ Hurzhii, A. M., O. H. Hlazunova, and T. V. Voloshyna. Digital Learning Content for the Open Education System: Modern Information Technologies and Innovative Teaching Methods in Training Specialists: Methodology, Theory, Experience, Problems. Kyiv-Vinnytsia: "Planer" LLC, 2020.

¹⁸ Lavnikov, O. A., and A. S. Lesyk. "Integrative Approach in the Higher Education System: Concepts and Features." *Bulletin of Alfred Nobel University. Series: Pedagogy and Psychology. Pedagogical Sciences*, vol. 1, no. 19, 2020, pp. 195–99. https://doi.org/10.32342/2522-4115-2020-1-19-23.

¹⁹ Rebukha, L. Z. Innovative Learning Technologies in the Context of Modern Education Modernisation. Ternopil: West Ukrainian National University (WUNU), 2022.

²⁰ Zeitner, D. "Dancing between Realities: Exploring the Body in Virtual Dance Improvisation." International Journal of Education & the Arts, vol. 24, no. 5, 2023. https://doi.org/10.26209/ijea24n5.

of a distance course, but in the context of art education, the question of the effective combination of theoretical and practical training of art teachers remains open.

In the field of education, prominent Ukrainian scientists such as Gurevich²¹, Hurzhii²², have conducted research that analysed the pedagogical and organisational aspects of combining learning formats in a blended mode. Additionally, Kuzminskyi²³ has explored blended learning as a model that involves the use of digital technologies, including computers, tablets, and smartphones, to stimulate interest in learning among art teachers. The work of Huang²⁴ emphasises the importance of art teachers' self-control in blended learning, highlighting that successful learning is possible due to partial freedom in choosing the time, place and pace of learning. However, the question of what percentage of class time should be allocated to online components remains controversial.

A fundamental component of the training of future art teachers is the development of teachers' methodological competence Simonson²⁵,Zhen²⁶. A modern teacher should not only know the teaching methods but also effectively implement information and communication technologies. Methodological competence includes: knowledge of pedagogical technologies; ability to design the content of training modules; use of interactive approaches; adaptation of methods to the digital environment. However, the lack of sufficient training

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²¹ Gurevich, R., H. Gordiychuk, M. Kademiya, and V. Kobysya. "Training Future Teachers in the Informational Educational Environment of Pedagogical Higher Education Institutions." *Modern Information Technologies and Innovative Teaching Methods in Training Specialists: Methodology, Theory, Experience, Problems*, no. 57, 2020, pp. 5–14. https://doi.org/10.31652/2412-1142-2020-57-5-14.

²² Hurzhii, A. M., O. H. Hlazunova, and T. V. Voloshyna. Digital Learning Content for the Open Education System: Modern Information Technologies and Innovative Teaching Methods in Training Specialists: Methodology, Theory, Experience, Problems. Kyiv-Vinnytsia: "Planer" LLC, 2020.

²³ Kuzminskyi, A. "Features of Digital Transformation of Professional Training of Future Teachers in Blended Learning Conditions." Bulletin of Hlukhiv National Pedagogical University *Named after Oleksandr Dovzhenko*, vol. 3, no. 56, 2024, pp. 17–23. https://doi.org/10.31376/2410-0897-2024-3-56-17-23.

²⁴ Huang, F., and J. Xu. "New Teaching Approaches to Art and Design Education in the Digital Age." SHS Web of Conferences, vol. 181, 2024, p. 01046. https://doi.org/10.1051/shsconf/202418101046.

²⁵ Simonson, M., S. Smaldino, M. Albright, and S. Zvacek. Teaching and Learning at a Distance: Foundations of Distance Education. 2nd ed., Upper Saddle River, NJ: Merrill Prentice Hall, 2003.

²⁶ Zhen, C. "Features of the Training of Future Specialists of Choreographic Art in the Educational Process of Institutions of Higher Education of the PRC." *Education. Innovation. Practice*, vol. 10, no. 7, 2022, pp. 50–53. https://doi.org/10.31110/2616-650X-vol10i7-008.

for teachers in digital technologies is a significant barrier to the effective implementation of blended learning in art education.

The analysis of the existing literature highlights the potential of blended learning as a modern approach to the organisation of education in higher education institutions, especially in the field of art. However, there are still some challenges, including aspects such as determining the ideal ratio of traditional and online components, professional training of teachers to work in a digital environment, creating effective methods for assessing the performance of art teachers and adapting these models to the specifics of art education in higher education institutions.

3. Methods

The study used a set of scientific methods that allowed for a comprehensive analysis of the issues of implementing blended learning in the training of future art teachers, covering the systemic, theoretical, methodological and practical aspects of the problem.

- 1. The present study employed a method of logical and structural structure to conduct an in-depth systematic analysis of the conceptual foundations of the integration of blended learning into art education. This analysis resulted in the identification of the key structural elements of this process, their interaction and features of implementation in the context of the educational process, as well as the establishment of logical links between traditional forms of education and digital technologies. This contributed to the assessment of their effectiveness in the formation of students' professional competences and provided an opportunity to form the basis for substantiating educational models for implementing blended learning and assessment criteria.
- 2. The competence-based approach is the methodological basis of the study and is aimed at developing professional competences in the professional training of art teachers, which are necessary for effective pedagogical activity in the context of digital education. This approach enabled the assessment of students' preparedness in mastering modern digital tools, the development of evaluation criteria for professional readiness of future art teachers in using blended learning, and the identification of factors influencing the effectiveness of integrating digital methods into art education. Special emphasis was placed on the need to expand professional training by incorporating modules into educational programmes that aim to develop skills in using interactive platforms, multimedia resources, and digital artistic technologies.

3. The modelling method was employed to create a conceptual model of blended learning adapted to the specific needs of training future art teachers. This included constructing a structural model encompassing organisational, methodological, and technological components, as well as developing an integrated learning system. This system combines digital platforms for online theoretical study of artistic disciplines with classroom-based sessions for practical mastery of artistic techniques, musical skills, and stage performance. Additionally, it facilitated the proposal of adaptive educational strategies tailored to different levels of training among future art teachers.

4. Results

The term "blended learning" first gained scientific recognition in 2006 thanks to the research of Curtis J. Bonk and Charles R. Graham²⁷, who presented its main concepts in their fundamental manual "The Handbook of Blended Learning: Global Perspectives, Local Designs²⁸". They viewed blended learning as an integration of different teaching approaches that combine traditional classroom teaching with digital technologies, distance education and independent work of art teachers under the guidance of a teacher.

In the context of training future art teachers in higher pedagogical education institutions, blended learning is of particular importance, as it allows combining practical art classes that require direct teacher involvement with digital tools that promote creative development, discussion of artistic concepts and the acquisition of theoretical knowledge. The implementation of the blended learning concept contributes to the creation of an adaptive educational environment that meets the modern challenges of digitalisation of education, allows students to freely master the learning material, actively interact in virtual artistic communities and develop their creative potential²⁹. In the context of training future art teachers in higher pedagogical education institutions, the following blended learning models adapted to the specifics of teaching art disciplines may be the most effective.

"Face-to-Face Driver" implies that the main part of the learning process takes place in a traditional face-to-face form, and electronic resources are used to supplement the learning material. In the context of art educator training,

²⁷ Bonk, C., C. Graham, J. Cross, and M. Moore. *The Handbook of Blended Learning: Global Perspectives, Local Designs*. San Francisco, 2006.

²⁸ idem

²⁹ Burke, K., W. Baker, and G. Hobdell. "Getting Hands-On: Praxis-Focused Assessment to Enhance Online Art Teacher Education." *Distance Education*, vol. 44, no. 2, 2023, pp. 213–29. https://doi.org/10.1080/01587919.2023.2198486.

this approach allows students to receive direct advice and practical skills under the guidance of a teacher during classroom sessions. At the same time, video tutorials, interactive learning modules and digital resources contribute to a deeper understanding of theoretical material³⁰.

"Rotation" is based on the cyclical alternation of group classroom sessions and individual work in a digital environment. It is optimal for training future artist-educators as it ensures synergy between practical artistic experience (such as studio painting or sculpture) and innovative formats: studying electronic methodological resources, watching expert video lectures, developing digital portfolios, and critically analysing artworks through virtual galleries or platforms.

"Flex" is a model where the main learning content is acquired by students independently through online resources, while the teacher's role is focused on providing consultative support (either in real-time or in a deferred format). For art education, this approach opens up opportunities for in-depth study of art history disciplines, analysis of contemporary art movements, collaborative project work through interactive boards, and personalised recommendations for creative tasks (such as correcting sketches or compositions through video meetings).

"OnlineLab" is a distinct model structurally oriented towards learning in specialised digital studios equipped with interactive panels, graphic tablets, software for 3D visualisation, and other technological solutions. In the context of art education, it enables students to experiment with digital formats of creativity: creating animation using Adobe Suite, designing installations in virtual reality, composing music tracks in audio editors, or developing interactive art projects. These features can help develop professional skills in integrating classical artistic techniques with modern technologies, which is essential for teaching activities in the digital era³¹.

"Self-blend" combines full-time study at an educational institution with independent online courses that students can choose according to their individual needs and interests. It is especially effective for future art teachers, as it allows them to supplement the university curriculum with original online courses by leading artists, designers, composers and other specialists, broadening their professional horizons and gaining new competences.

³⁰ Yang, J. "Retracted Article: Chinese Contemporary Art Teachers' Professional Development in the 20th and 21st Centuries within the Multicultural Framework." *Heritage Science*, vol. 10, 2022, p. 56. https://doi.org/10.1186/s40494-022-00692-8.

³¹ Henry, D., E. J. Brantmeier, A. Tongen, A. Taylor Jaffee, and O. Pierrakos. "Faculty Empowering Faculty: SoTL Leaders Catalysing Institutional and Cultural Change." *Teaching and Learning Inquiry*, vol. 9, no. 2, 2021. https://doi.org/10.20343/teachlearninqu.9.2.15.

"OnlineDriver" is a model that focuses on predominantly distance learning, during which the student learns most of the material through electronic resources, and interaction with the teacher occurs periodically in a face-to-face format in the form of consultations, assessments, exams or creative presentations. In the field of art education, this approach allows students to work independently on materials, complete digital art projects, and receive feedback from the teacher at key stages of their studies ³².

Blended learning in art teacher education involves a combination of traditional and innovative methods: classroom lessons on the basics of painting, graphics, sculpture or music are supplemented by interactive online resources, video tutorials, webinars and e-learning platforms. Within the framework of blended learning technology in art education, four main scenarios can be distinguished, which are adapted to the specifics of training future art teachers:

- 1. Classroom sessions, supplemented by online resources such as digital libraries, virtual galleries, multimedia learning materials, and video tutorials, will help deepen the understanding of artistic movements and techniques.
- 2. The integration of online communication tools will facilitate discussions on artistic concepts, analysis of creative works, and the organisation of remote consultations for art teachers through educational platforms, forums, social networks, video conferences, and similar means.
- 3. The combined use of classroom-based and remote learning methods provides students with the opportunity to work on creative projects, create presentations of artistic works, participate in virtual masterclasses, and experiment with digital technologies in art.
- 4. Fully remote learning in a virtual format will continue to ensure both synchronous and asynchronous interaction with the teacher. This will include online consultations, evaluation of creative projects, participation in art-related webinars, and submission of artistic works through virtual platforms³³.

³² Osadcha, K. P., V. V. Osadchyi, O. M. Spirin, and V. S. Kruhlik. "Conceptual Foundations for Developing an Adaptive System of Individualisation and Personalisation of Professional Training of Future Specialists in Blended Learning Conditions." *Pedagogy of Forming a Creative Personality in Higher and Secondary Schools*, vol. 3, no. 74, 2021, pp.

³³ Dinham, J. "Enacting the Signature Pedagogies of Arts Education in the Online Learning Environment for Primary Teacher Education." *Asia-Pacific Journal of Teacher Education*, vol. 52, no. 4, 2024, pp. 400–16. https://doi.org/10.1080/1359866X.2024.2378796.

Modular approach and evaluation criteria for blended learning in pedagogical higher education institutions for quality art teacher training

In the context of training future art teachers in higher pedagogical education institutions in a blended learning environment, organisational and pedagogical conditions are important to facilitate the effective acquisition of the necessary knowledge, the formation of professional competences and the development of the creative potential of music and visual arts teachers. Among the key conditions are professional and pedagogical, informational, and project activities that allow future teachers not only to master the theoretical foundations of art pedagogy but also to learn how to effectively use modern digital tools and technologies in their professional activities.

The forms of organising the educational process in preparing future art teachers to work in a blended learning environment can be different depending on the specifics of the discipline, the content of the educational material and the level of training of art teachers. The most effective forms include individual, pair, group and collective learning, which contribute to the development of both personal and team skills necessary for further pedagogical activity³⁴. At the same time, it should be borne in mind that the choice of a specific form of education should be coordinated with the peculiarities of interaction between art teachers in the educational process, as well as meet the requirements for teaching art disciplines, where an important component is the practical mastery of artistic techniques, methods of creative expression and means of visual or musical communication³⁵.

In this regard, models of developing future art teachers' readiness to work in a blended learning environment should be considered as a complex pedagogical system, the components of which are closely interrelated and play a key functional role in the learning process. An important aspect of this process is to determine the criteria and indicators of the level of readiness of future teachers for the effective use of blended methods in art education, including both mastery of traditional artistic techniques and skills in using digital platforms for distance learning, analysing artworks, creating multimedia projects and interactive art resources (Table 1).

³⁴ Simonson, M., S. Smaldino, M. Albright, and S. Zvacek. *Teaching and Learning at a Distance: Foundations of Distance Education*. 2nd ed., Upper Saddle River, NJ: Merrill Prentice Hall, 2003.

³⁵ Yezhova, O. "Professional Training of Future Specialists in the Field of Technology and Design Using Digital Technologies." *Journal of Vasyl Stefanyk Precarpathian National University*, vol. 11, no. 1, 2024, pp. 20–24. https://doi.org/10.15330/jpnu.11.1.20-24.

Table 1

Name of the criterion	Characteristics of the criterion
Motivational and value- based	Assessment of the level of professional motivation, analysis of artistic and pedagogical values, ability to self-development, and interest in using blended learning in art education.
Content and practical	Acquiring knowledge about blended learning, developing skills in integrating digital technologies into teaching artistic disciplines, understanding pedagogical approaches to combining traditional and online learning.
Reflective and evaluative	Ability to analyse own pedagogical activities, forecast professional development, self-assessment of the level of preparation for teaching art disciplines in a mixed format, awareness of the compliance of their professional competence with modern educational standards.

Criteria for preparing future art teachers to work in a blended learning environment. Source: constructed by the author

In the course of researching the problem of developing criteria and levels of assessment of future art teachers' readiness to work in new educational conditions, it was found that the criteria and indicators reflect the key structural components of teachers' readiness, including the level of methodological training, mastery of digital technologies in teaching art, skills in integrating traditional and online forms of education, as well as the ability to adapt creatively in the context of changing educational environment for professional training of teachers³⁶.

The blended learning system is an effective educational model that works particularly well in the training of future art teachers when electronic educational resources are used before classroom instruction. As a result, students come to class with a basic understanding of basic concepts, terminology and artistic techniques, which contributes to a more efficient use of class time. As a result, the teacher can pay more attention to the practical processing of the material, development of artistic skills, analysis of creative works and development of art teachers' critical thinking about artistic styles, genres or methods of teaching art³⁷.

³⁶ Vitvytska, S. S. *Modelling Professional Training of Specialists in the Context of European Integration Processes*. Zhytomyr: O. O. Yevenok Publishing, 2019.

³⁷ Kulikova, S. V. "Distance Learning in the Main Musical Instrument Class (Piano)." *Scientific Notes. Series: Pedagogical Sciences*, vol. 204, 2022, pp. 158–61. https://doi.org/10.36550/2415-7988-2022-1-204-158-161.

The modern educational process cannot exist without the use of distance learning technologies, which allow expanding the possibilities of traditional learning and making it more flexible and accessible. They cover various formats, including online courses that do not involve face-to-face classes, interactive e-platforms that complement the learning process, and multimedia resources used for in-depth study of academic disciplines. For the training of future art teachers, it is particularly effective to combine online learning with practical classroom classes when part of the discipline material is presented in a remote format. The formation of artistic, musical or theatrical skills takes place in the process of direct work with the teacher in studios, workshops or art laboratories³⁸.

As part of the current study, digital educational resources adapted to the disciplines of the artistic field, in particular, "Theory and Methods of Music Education" and "Theatre Pedagogy", which are planned to be implemented in the educational process from the new academic year. These educational platforms are designed with the specifics of blended learning in mind, allowing future art teachers not only to acquire fundamental knowledge but also to develop practical skills in a comfortable, interactive format, combining digital technologies and traditional teaching methods (Table 2³⁹).

Table 2

The module of the discipline "Theory and Methods of Music Education"	The module of the discipline "Theatre pedagogy"	
Module 1: Theoretical foundations of music education for children	Module 1: Music as an artistic phenomenon. Fundamentals of musical education of preschool children. The role of music in the formation of artistic and aesthetic worldview.	
Module 2: Theoretical foundations of theatre art	Module 2: Fundamentals of theatre art. Stages of formation and development of theatre. Contemporary theatrical art: genres, forms, syncretism of theatrical performance. Fundamentals of creating a stage image.	

Voitovych, I. S., editor. Teacher Training for Professional Activity in Blended Learning Conditions. Lutsk: FOP Hadyak Zh. V., "Volynpolygraph" TM, 2024.

Naumenko, N. "Model of Forming Future Music Teachers' Readiness to Work in Blended Learning Conditions." Scientific Issues of Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University. Series: Pedagogy and Psychology, vol. 78, 2024, pp. 25–33. https://doi.org/10.31652/2415-7872-2024-78-25-33.

Module 3: Practical aspects	Module 3: The main types of musical activities of		
of music education	children: listening to music, singing, musical and		
	rhythmic movements. Methods of teaching		
	musical instruments. The role of musical classes		
	in the development of children's creative abilities.		
	The use of music in the educational process of		
	the educational institution.		
Module 4: Theoretical	Module 4: Theatre pedagogy and its importance		
foundations of children's	in the development of preschool children.		
theatre activity	Formation of acting skills. The use of theatrical		
	techniques in the pedagogical process.		
Module 5: Methods of	Module 5: Organisation of theatre classes in		
organising theatre activities	preschool education institutions. Methods of		
	involving children in theatrical activities. Practical		
	training in acting.		

Training modules for the preparation of future art teachers in a blended learning environment Source: constructed by the author

At the same time, the training of future art teachers requires a balance between digital educational technologies and direct communication with the teacher, which is an important element of the pedagogical process. It is the direct immersion in the artistic environment, discussion of artworks, exchange of ideas, and collective creation of projects that allows students to develop their own creative style and understanding of artistic processes.

Substantiation of effective models for establishing blended learning for the training of future art teachers

In the process of training future art teachers in a blended learning environment, special attention should be paid to the choice of effective educational models that allow for the optimal combination of traditional teaching

methods with digital technologies. The system of training future art teachers in a blended format should include the following important components⁴⁰ ⁴¹:

Clearly defined target orientation, which takes into account the specifics of art education and the need to develop creative skills in art teachers; a balanced ratio of traditional and e-learning, which allows you to effectively use the potential of both formats; individualisation of the educational process, which provides art teachers with the opportunity to choose the pace and trajectory of learning; a sufficient level of independence that promotes the development of responsibility and self-education skills; the optimal duration of training cycles, which allows for the harmonious integration of practical tasks into the overall structure of the educational process; various forms of organising learning activities that combine classroom lessons, distance lectures, interactive creative tasks and virtual masterclasses.

The domestic Ukrainian experience of implementing innovative educational projects in the field of blended learning has allowed us to test several well-known models that demonstrate high efficiency in art pedagogy. The most relevant approaches include the Flipped Classroom, Changing Work Zones, Autonomous Group, and Extracurricular Activities. All of these models combine traditional forms of teaching with online courses, but differ in terms of their target focus, forms of organising learning activities, stages of using digital resources, the level of independence of art teachers, and the nature of interaction with the teacher⁴².

The flipped classroom model envisages that students learn the primary educational material independently using electronic educational resources, and during classroom sessions, they discuss, analyse and apply it in depth. The teacher uses the free class time to conduct interactive classes, during which students have the opportunity to work on creative tasks, discuss artistic concepts, analyse artworks and apply theoretical knowledge in practice.

⁴⁰ Avila-Garzon, C., and J. Bacca-Acosta. "Curriculum, Pedagogy, and Teaching/Learning Strategies in Data Science Education." *Education Sciences*, vol. 15, no. 2, 2025, p. 186. https://doi.org/10.3390/educsci15020186.

Rebukha, L. Z. Innovative Learning Technologies in the Context of Modern Education Modernisation. Ternopil: West Ukrainian National University (WUNU), 2022.

Chernoivanenko, A. D. Academic Musical-Instrumental Art as a Subject of Musicological Systemology. Odesa: Helvetyka Publishing House, 2021.; Osadcha, K. P., V. V. Osadchyi, O. M. Spirin, and V. S. Kruhlik. "Conceptual Foundations for Developing an Adaptive System of Individualisation and Personalisation of Professional Training of Future Specialists in Blended Learning Conditions." Pedagogy of Forming a Creative Personality in Higher and Secondary Schools, vol. 3, no. 74, 2021, pp. 65-70.

The key component of the model is the use of modern digital educational platforms that include video lectures, e-textbooks, instructional materials in PDF format, and interactive tasks for knowledge testing⁴³.

To achieve the best results, students receive homework 5-10 days before the class, work through the educational materials on their own, and during classroom work, they discuss complex issues and engage in collective creative activities. The main structural components of digital educational resources are presentations, interactive tests, web quests, training videos and didactic games.

"Changing workspaces. This model combines traditional teaching with interactive methods that allow students to work in different learning spaces, which contributes to deeper learning. In this approach, a group of art teachers is divided into several zones, each with its function:

- 1. The first zone is working with electronic resources in an independent mode according to the teacher's pre-designed instructions.
- 2. The second zone is group work, which involves discussions, the creation of joint art projects and the exchange of ideas.
- 3. The third area is individual interaction with the teacher in the form of consultations, creative discussions or analysis of completed assignments.
- 4. This approach encourages art teachers to search for information on their own, develop teamwork skills, promote analytical thinking, and allows the teacher to work with each student according to their level of preparation⁴⁴.

"Autonomous group". This model is aimed at art teachers who have a high level of independence and the ability to organise their learning process. It involves the creation of study groups that work on creative tasks in a remote format, using electronic resources, video tutorials and interactive platforms. The teacher provides support in the form of periodic consultations, webinars or creative workshops, monitoring the progress of tasks and evaluating the final result⁴⁵.

Chust-Pérez, V., R. P. Esteve-Faubel, M. P. Aparicio-Flores, and J. M. Esteve-Faubel. "Enhancing Visual and Plastic Education Training: A Blended Learning and Flipped Classroom Approach." *Journal of New Approaches in Educational Research*, vol. 13, 2024, article 11. https://doi.org/10.1007/s44322-024-00011-y.

⁴³ Chaka, C. "Fourth Industrial Revolution - A Review of Applications, Prospects, and Challenges for Artificial Intelligence, Robotics and Blockchain in Higher Education." Research and Practice in Technology Enhanced Learning (RPTEL), vol. 18, no. 2, 2023. http://rptel.apsce.net/index.php/RPTEL/article/view/2023-18002.

Pavlou, V., and A. Castro-Varela. "E-Learning Canvases: Navigating the Confluence of Online Arts Education and Sustainable Pedagogies in Teacher Education." *Sustainability*, vol. 16, no. 5, 2024, p. 1741. https://doi.org/10.3390/su16051741.

"Extracurricular activities". The selected model is aimed at expanding the educational space, allowing students to participate in virtual exhibitions, online competitions, art conferences, webinars, and project workshops, which further ensures not only in-depth learning of the educational material, but also enables students to implement their own creative ideas in a professional environment.

In order to achieve optimal results in the training of future art teachers, it is important to adhere to the following conditions for the implementation of blended learning:

- a precise selection of educational material for work in various formats (classroom activities, distance learning, independent creative work);
- the organisation of group activities that take into account the level of training of art teachers, their artistic and aesthetic abilities and individual characteristics;
- ensuring effective control of learning outcomes, including reflective analysis, self-assessment, mutual assessment and final control of knowledge and skills.

One of the features of blended learning in art education is the possibility of adaptive use of course resources: if students have a sufficient level of independence, they can work with online course materials directly, processing them in a convenient format. In other cases, it is recommended to combine the use of digital resources with preliminary explanations by the teacher, which allows gradually involving art teachers in new teaching methods. The presented model also provides for the division of art teachers into large and small study groups depending on the complexity of the educational material and the level of training of art teachers⁴⁶. Improving the quality of art education within the outlined model is achieved through:

- independent work of art teachers with digital educational resources (video lessons, multimedia presentations, interactive modules, methodological manuals);
- individual consultations with the teacher, which are aimed at discussing creative tasks, analysing artworks, and analysing complex topics;
- interactive work within the educational portal, where students have access to learning materials, tests and assignments⁴⁷.

⁴⁶ Kuzminskyi, A. "Features of Digital Transformation of Professional Training of Future Teachers in Blended Learning Conditions." *Bulletin of Hlukhiv National Pedagogical University Named after Oleksandr Dovzhenko*, vol. 3, no. 56, 2024, pp. 17–23. https://doi.org/10.31376/2410-0897-2024-3-56-17-23..

⁴⁷ Panukhnyk, O. "Artificial Intelligence in the Educational Process and Scientific Research of Higher Education Applicants: Responsible Boundaries of Al Content." *Galician Economic Bulletin*, vol. 84, no. 4, 2023, pp. 202–11. https://doi.org/10.33108/galicianvisnyk_tntu2023.04.202.

The necessary conditions for the implementation of this model are:

- forming autonomous study groups depending on the needs of art teachers:
- official registration of groups on the educational portal for access to training materials and test tasks;
- mandatory study of learning resources and completion of control tasks by all students.

The "Autonomous Group" model is effective in training future art teachers, as it promotes in-depth study of art disciplines, the formation of an individual creative style and the development of independent research skills. It also supports the principle of "mastery-based learning", which was proposed by the Clayton Christensen Institute as one of the professional approaches to blended learning.

The "Extracurricular Activity" model in art pedagogy. One of the key methods of organising the educational process is to integrate the extracurricular activities of art teachers into the curriculum. The model also assumes that students learn new material on their own and then consolidate it in practical activities, performing creative tasks at home or at an educational institution. The main stages of implementing this model include⁴⁸:

- introduction to new topics through digital educational resources (online courses, webinars, interactive presentations, video lectures, web pages);
- consolidation of theoretical knowledge through creative tasks (creation of artistic works, musical compositions, theatrical performances, development of own art projects);
- checking learning outcomes through test assignments and individual consultations with the teacher.

For the effective implementation of the model, a wide range of digital learning materials is used, in particular⁴⁹:

- web pages and online platforms for studying educational material:
- presentations, video lectures and simulators that allow you to learn information in an interactive format;
- control tests and tasks of different levels of difficulty to assess the level of art teacher training.

Samus, T. "Digital Transformation of Professional Training of Future Vocational Education Teachers in Blended Learning Conditions." *Science and Technology Today*, vol. 5, no. 33, 2024, pp. 875–85. https://doi.org/10.52058/2786-6025-2024-5(33)-875-885.

Sikora, Ya., O. Skorobahatska, H. Lykhodieieva, A. Maksymenko, and Y. Tsekhmister. "Informatisation and Digitisation of the Educational Process in Higher Education: Main Directions, Challenges of the Time." *Revista Eduweb*, vol. 17, no. 2, 2023, pp. 244–56. https://doi.org/10.46502/issn.1856-7576/2023.17.02.21.

Thanks to a flexible approach to learning, the Extracurricular Activities model creates opportunities for individual development of art teachers, improves their academic performance and contributes to the formation of professional competences in the artistic field.

The general advantages and features of blended learning models in the training of future art teachers are presented in Table 3.

Table 3

Type of model	Characteristics	The resulting goal of the implementation	Educational facilities	Organisation of classes and training
The inverted classroom	Students study theoretical material online, discuss complex aspects, and complete practical tasks in the classroom.	Increase learning efficiency by saving time on explaining theory and focusing on practice.	Interactive videos, presentations , electronic textbooks.	Preliminary acquaintance with the topic, classroom discussion, practical tasks, assessment of knowledge.
Change of work areas	Groups of art teachers work in different learning areas: one with online resources, the other with traditional resources, with further rotation.	Differentiated approach and integration of digital technologies into the educational process.	Digital platforms, interactive tasks, teaching materials.	Dividing art teachers into groups, working in zones, interacting with the teacher, monitoring results.
Autonomous	The class is divided into groups: one works traditionally, and the other uses online resources.	Developing independent skills and flexibility in learning the material.	Electronic tests, video lectures, case studies.	Traditional classroom work, additional online activities, and teacher consultations.
Extracurricular activities	The primary material is studied in the classroom, and creative consolidation is done at home using online courses.	Expanding opportunities for independent learning and creative development of art teachers.	Web resources, creative tasks, video tutorials.	Classwork, home creative tasks, analysis of the results.

Models of blended learning in the training of future art teachers
Source: constructed by the author

Although students and teachers perceive the blended learning model differently, it has a number of significant advantages. In particular, this form of organising the educational process is indispensable in the face of epidemiological risks or other force majeure circumstances when traditional classes are challenging to conduct.

The results of the conducted study confirm that the integration of blended learning in the training of future art educators aligns with contemporary trends in the educational paradigm. However, certain aspects of this approach, particularly methodological and technological ones, require in-depth analysis to refine optimal models for their implementation. A comparative analysis with existing academic research has allowed for the identification of key trends in the introduction of hybrid formats in arts education, such as the increasing focus on digital tools, as well as systemic barriers related to organisational complexity, insufficient infrastructure, and psychological aspects of participants' adaptation to the educational process.

A review of the literature revealed a lack of consensus on the definition of the term "blended learning". While Graham⁵⁰ describe it as the synergy of traditional classroom activities with online components, Bovill⁵¹ shifts the research focus to the need for a dynamic balance between digital and offline elements, which must be tailored to the specifics of each discipline. Despite differences in interpretation, researchers unanimously emphasise the importance of flexibility in selecting models, especially in the context of arts disciplines, where the combination of practical creativity and technology requires thorough methodological justification.

Studies by researchers⁵², highlight significant advantages of the blended format in arts education, such as increased student motivation through interactivity, the development of self-organisation skills, and the opportunity to integrate global artistic practices via digital platforms. However, empirical data have identified substantial challenges: a low level of digital competence among educators limits the effectiveness of innovative tools, while unequal access to technological resources among students creates a risk of social inequality in

Graham, C. R., S. Allen, and D. Ure. "Benefits and Challenges of Blended Learning Environments." Encyclopedia of Information Science and Technology I–V, edited by M. Khosrow-Pour, Idea Group Inc., 2005. http://dx.doi.org/10.4018/978-1-59140-553-5.ch047.

⁵¹ Bovill, C. "Co-creation in Learning and Teaching: The Case for a Whole-Class Approach in Higher Education." *Higher Education*, vol. 79, no. 1, 2020, pp. 1023–37. https://doi.org/10.1007/s10734-019-00453-w.

Chernoivanenko, A. D. Academic Musical-Instrumental Art as a Subject of Musicological Systemology. Odesa: Helvetyka Publishing House, 2021.; Istenič, A. "Blended Learning in Higher Education: The Integrated and Distributed Model and a Thematic Analysis." Discover Education, vol. 3, 2024, p. 165. https://doi.org/10.1007/s44217-024-00239-y.

education.⁵³ Study describes teachers' readiness for blended learning as a complex process that includes methodological, technical, and motivational components. Our work complements these findings by emphasising the need for adaptive methodological tools specialised in the arts.

Studies⁵⁴ emphasise that the integration of blended learning into art education is becoming an effective tool for developing both technical and soft competences in students, as the combination of online platforms for organising distance interaction, traditional classes and open educational resources helps to increase interest in independent learning and research; this approach not only helps students to effectively implement group art projects, but also provides an opportunity to overcome existing barriers associated with the limitations of traditional teaching methods.

The analysis of⁵⁵ shows that although blended learning is characterised by significant advantages, including flexibility in the organisation of the educational process and its efficiency, there are also certain disadvantages, among which are difficulties related to the correct conceptualisation and design of courses, as well as the lack of technical skills and digital literacy among both teachers and students, which often leads to technical problems and communication misunderstandings; This, in turn, highlights the importance of systematic professional development of teachers and ensuring equal access to modern technologies for all participants in the educational environment to maximise the potential of blended learning.

Lavnikov, O. A., and A. S. Lesyk. "Integrative Approach in the Higher Education System: Concepts and Features." Bulletin of Alfred Nobel University. Series: Pedagogy and Psychology. Pedagogical Sciences, vol. 1, no. 19, 2020, pp. 195–99. https://doi.org/10.32342/2522-4115-2020-1-19-23.

Avila-Garzon, C., and J. Bacca-Acosta. "Curriculum, Pedagogy, and Teaching/Learning Strategies in Data Science Education." *Education Sciences*, vol. 15, no. 2, 2025, p. 186. https://doi.org/10.3390/educsci15020186.
Bonk, C., C. Graham, J. Cross, and M. Moore. *The Handbook of Blended Learning: Global*

Perspectives, Local Designs. San Francisco, 2006.; Yang, J. "Retracted Article: Chinese Contemporary Art Teachers' Professional Development in the 20th and 21st Centuries within the Multicultural Framework." *Heritage Science*, vol. 10, 2022, p. 56. https://doi.org/10.1186/s40494-022-00692-8.

Hurzhii, A. M., O. H. Hlazunova, and T. V. Voloshyna. Digital Learning Content for the Open Education System: Modern Information Technologies and Innovative Teaching Methods in Training Specialists: Methodology, Theory, Experience, Problems. Kyiv-Vinnytsia: "Planer" LLC, 2020.; Naumenko, N. "Model of Forming Future Music Teachers' Readiness to Work in Blended Learning Conditions." Scientific Issues of Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University. Series: Pedagogy and Psychology, vol. 78, 2024, pp. 25–33. https://doi.org/10.31652/2415-7872-2024-78-25-33; Vitvytska, S. S. Modelling Professional Training of Specialists in the Context of European Integration Processes. Zhytomyr: O. O. Yevenok Publishing, 2019.

The scientific results obtained confirm the prospects of using blended learning in art education, specifically for pedagogical institutions of higher education. However, it is necessary to continue research to create specific methodological approaches to implement such models in practice. Particular attention should be paid to the development of systems for assessing the quality of students' knowledge and improving the digital skills of art teachers. Thus, further work should be aimed at the practical improvement of this area of higher education.

5. Conclusion

The study examines the main concepts of blended learning, which highlight its complex nature, combining traditional classroom classes, distance educational technologies, independent and teamwork of art teachers, as well as interactive artistic methods. Modern models of blended learning were analysed in order to adapt them to the needs of art education, which made it possible to assess their level of effectiveness in developing the competences of future art teachers, emphasising the importance of a balance between practical and theoretical aspects.

Attention is focused on the methodological readiness of teachers, which is key to the successful implementation of blended learning. This requires improving their professional skills in the field of digital technologies, including multimedia platforms, art software, online courses and interactive communication tools. It has been established that there is a direct link between the professional level of educators and the effectiveness of the educational process, which necessitates the systematic improvement of professional development programmes and the expansion of opportunities for teachers' professional growth. In response to this need, a set of assessment criteria has been developed to analyse the readiness of arts educators to implement blended learning models. The proposed system considers three key components: motivational (interest in innovations), practical (proficiency in digital tools), and reflective (ability to analyse one's own teaching practice).

Particular attention has been paid to the creation of an integrated learning approach that combines academic artistic techniques with modern technological solutions. Among the latter are virtual masterclasses, interactive multimedia libraries, platforms for creating electronic portfolios, and tools for online consultations that enable the modelling of artistic processes in a digital environment. Based on experimental data, strategic priorities for the development of hybrid learning in arts education have been identified. These include: methodological support – the creation of detailed guides for integrating digital tools into creative disciplines; technological infrastructure – the development of

specialised platforms for remote work on artistic projects, including collaborative functions and visualisation of creative stages; skills adaptation – the use of artificial intelligence and analytical tools for personalised learning and the refinement of practical artistic skills; community interaction – the expansion of opportunities for interdisciplinary dialogue through virtual galleries, online discussion clubs, and international artistic collaborations.

The implementation of these directions will contribute to the formation of an ecosystem in which traditional pedagogical approaches synergistically integrate with innovations, ensuring flexibility, accessibility, and high-quality arts education in the context of digital transformation.

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