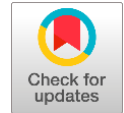


Special Issue: Educational articles from Asian and European countries

The role of innovative educational technologies in the training of specialists in the field of culture and arts: European experience

Vasyl Bilan^a   | Rostyslav Hromadskyi^b  | Ganna Zavadska^a  | Olena Suslenska^a  |
Tetiana Yalokha^a ^aThe Kyiv National I. K. Karpenko-Karyi University of Theatre, Cinema and Television, Kyiv, Ukraine.^bThe Kyiv National I. K. Cinema and Television Faculty of Theatre Arts Karpenko-Karyi University of Theatre, Kyiv, Ukraine.

Abstract The purpose of the article is to determine the role of innovative educational technologies in the training of specialists in the field of culture and arts based on the study of the European experience. To achieve this goal, the methods of analysis, synthesis, deduction, induction, specification, and comparison were used. The results consider the theoretical foundations of the use of innovative technologies in modern education. In the realm of culture and arts, it holds a pivotal role in training specialists. By drawing insights from the European experience, it becomes evident that cutting-edge learning approaches are founded on embracing novel ideas and a continual reevaluation of values. Also, it is crucial to consider its broad accessibility and ongoing nature. It is shown that education in European art universities and academies actively employs collective, modular, integrative, and developmental methods. In the modern practice of art education, the application of new and effective methods is of utmost importance to foster the creative and personal growth of aspiring professionals in the cultural and artistic fields. Among these methods, particular attention is given to students' project activities, which synergize successfully with digital technologies and distance learning. The novelty of the work is the author's own structure of innovative education. The conclusions determine that the main function of modern education is human development, so students in modern circumstances should focus on the possibilities of self-learning and the use of digital technologies (current trends in the field of culture and arts).

Keywords: culture and arts, digitalization, innovative technologies, education in the EU, distance education

1. Introduction

1.1. Research Problem

It is difficult to imagine training a modern specialist in the field of culture and arts without the use of advanced, innovative technologies in education. These tools are trendy things today, covering all areas of pedagogy, and used all the time. The reason for this popularity is the requirements of the professional environment, employers, personal motivation to reach new heights and move up the career ladder. At the same time, the requirements of constant growth are provided by the development of digital technologies: the more actively they are integrated into the cultural sector, the more they require attention from a specialist already at the stage of training. The variability of digital tools also leads to the need for constant updating of knowledge.

1.2. Research focus

Given the rapid development of digital technologies, the process of change is quite dynamic, so modern innovative technologies require a constant increase in the amount of knowledge. In the realities of the information society of the 21st century, this goal can only be achieved using innovative technologies in education, as they not only provide knowledge but also teach how to find the necessary information throughout life. This trend, which is relevant for modern education, requires a more detailed consideration and comprehension, considering the peculiarities of work in the field of cultural studies.

1.3. Research goal and questions



Therefore, the purpose of the article is to determine the basis and scope of the application of innovative educational technologies in the training of specialists in the field of culture and arts based on European experience. The realization of this goal requires the fulfillment of the relevant tasks:

1. To consider the theoretical understanding of innovative technologies in education.
2. To characterize the educational technologies in the training of specialists in the field of culture and arts in the EU countries.

The training of relevant specialists in the European Union has been chosen for the reason that in the prospects of Ukraine's European integration, the study of possible forms of harmonization in education is an extremely important element. The realization of the purpose of the article also involves the disclosure of issues related to the theoretical foundations of the modern educational process in European countries (use of innovative technologies), the use of certain innovative methods in the field of teaching culture and arts.

2. Materials and Methods

The method of concretization allowed us to study the peculiarities of the introduction of innovative methods and their general understanding through the prism of the analysis of modern scientific literature. The method of abstraction was used to formulate our own conclusions, in particular in the discussion of trends in the development of innovative technologies in the field of culture and arts in Ukraine. The comparative method was used to determine the basic educational principles. The prognostic method allowed us to outline an indicative list of functional actions necessary to improve the training of specialists in the field of culture and arts in Ukraine. The work is based on a systematic research method, which considers education as a complex set of various elements.

2.1. Data analysis

Statistical methods were used to demonstrate certain results of the study. The ranking of the world's regions by the level of Internet coverage was studied, and the statistical method was also used when working with data on the level of digital competences required for the successful completion of training. The research was conducted in several stages. At the beginning, the main scientific literature on the subject was reviewed using the analysis method. The analysis method also helped to understand the main problematic issues that were only partially covered. At the next stage of the study, the main statistical data were identified, which, thanks to the application of the synthesis method, significantly deepened the existing understanding of innovative educational technologies and the specifics of their implementation in the training of specialists in the field of culture and arts. The methods of specification and abstraction were also used to draw conclusions. In particular, the use of the method of concretization helped to interpret abstract or complex concepts, objects or phenomena, allowing to see them in action or in the context of real situations. The method of abstraction was used to summarize the results of the study and to understand the general patterns of development of innovative educational technologies, principles, ideas or concepts by highlighting essential characteristics and ignoring details in cultural education.

3. Results

3.1. Innovative technologies in education: a theoretical review

Education is a system that is variable in its content and uses a variety of forms and methods, as it must respond in a timely manner to new civilizational challenges and social realities and take into account trends and prospects for human development at the national and global levels. At the same time, updating educational practices often lags behind the pace of civilizational development and social requirements. For a long time, especially in the early stages of human development, this problem was not as important as in the times of industrial and post-industrial (information) development. Today, this problem is extremely relevant, as there has been a significant breakthrough in scientific and technological development and a radical change in traditional ideas about the world, life, its values, and the future of civilization in general (Trach et al., 2020). For this reason, it is important to use innovative technologies that significantly compensate for the lag of educational methods from the requirements of society. The features of innovative learning are openness to the future, the ability to anticipate based on a constant reassessment of values, and a focus on constructive action in changing situations (Zhang & Aslan, 2021). In the modern world, the development of the system and content of education takes place in the context of global educational trends, which include mass and continuity of education as a new quality, the importance of education for the individual and society, a focus on the active development of the human cognitive activity, adaptation of the educational process to the needs and demands of the individual, focusing learning on the individual and providing opportunities for self-discovery. These trends indicate that the main function of education is human development. In European countries, this rule is given special attention both in the design of the curriculum, planning, and implementation of the pedagogical process (Aljad, 2023). From the point of view of modern European practitioners, education should provide ample opportunities for each student to obtain certain conditions for development and preparation for life. This system includes the formation of knowledge about people, natural phenomena, and social processes that contribute to the formation of a scientific picture of the world as a worldview and the

potential choice of a field of future practice (Liubarets et al., 2022). A separate important element of innovative education is the formation of communication experience, emotional perception, which involves the formation of basic intellectual, labor, organizational information, skills, and abilities that are necessary in everyday life for active participation in public life and production processes, continuing education, and self-education. At the same time, an important part of innovative education is the formation of students' experience of independent research and creative work, the development of individual psychological and creative abilities (Poplavskiy et al., 2020). Innovative education is also aimed at developing active participation in the socio-political life of students, arranging their lives based on the use of generally accepted ideals, and moral and aesthetic guidelines (see Figure 1).

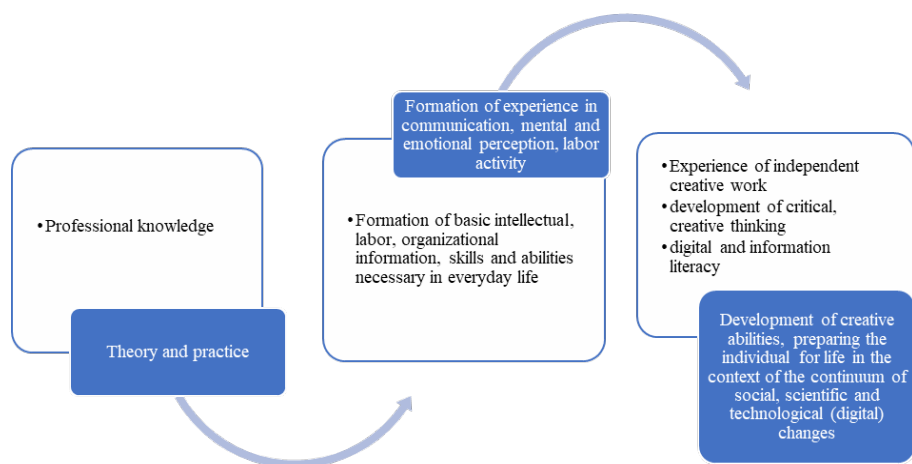


Figure 1 Structure of innovative education.

To improve the effectiveness of the education system, innovations can be introduced into practice. The process of introducing innovations in the field of education is complex and includes the gradual updating and improvement of content, methods, tools, and pedagogical technologies, which also affects the quality of the pedagogical process (Aljad, 2023). This results in several outcomes at once, including the free choice of a learning path by students in the field of culture and arts that will allow them to develop individually and career-wise (Aljad, 2023). Thanks to innovative pedagogical practices, students and their potential employers have the opportunity to influence the content of education, which did not exist before. Such transformations should be considered quite timely, as the dynamic development of society required an equally dynamic response from the educational system.

The term “innovative” is used to refer to modern cultural manifestations with which humanity was not familiar. Contemporary scholars identify two main ways in which innovations appear. The first way is internal. It is a purposeful invention. The other is external, based on the borrowing and mastering of certain phenomena from other cultures. At the same time, borrowing is the most common form of innovation development. It is primarily used in education. In the context of the pedagogical process, the term “innovation” means the introduction of a new approach to the purpose, content, methods, and forms of teaching and learning, as well as joint activities between teacher and student. Pedagogical innovation includes innovations in pedagogical activities aimed at improving its effectiveness through changes in the content and technology of teaching and learning (Zhang & Aslan, 2021). The innovation process involves the creation, development, use, and dissemination of new ideas and methods. Innovation is a change that introduces stable new elements into the educational environment and leads to the transition of the system from one state to another.

According to the degree of novelty, the researchers proposed to distinguish several types of innovations in the education sector:

1. Retro-innovation. The essence of this phenomenon is that periodically, although slightly modified, educational factors already known from the past are introduced into modern practice (Andersone, 2020). Even in the digital era, a number of modified phenomena have been introduced that, due to certain historical circumstances, were no longer fully used before (for example, specialized training is popular today, which is widely used in German universities, including in the field of culture and arts).

2. Analog innovation. The essence of this phenomenon is that as a result of pedagogical interaction, changes are made to the functioning of already-known approaches. Examples include the introduction of a 1000-point rating system instead of a 100-point system, partial replacement of the modular learning system (or its supplement) with a block-modular system aimed at wider use of self-education options (in particular, such improved approaches are actively used in French universities).

3. Combinatorial innovation, which consists in the formation of a qualitatively new educational technology by combining already known methods, partially modifying them, or inventing new elements. The modern use of digital technologies makes

it possible to apply this process widely, as the opportunities for creating something new in the context of digitalization are much greater (Kostenko et al., 2023).

4. Essential innovation. The importance of this type lies in the creation of completely new approaches in the process of professional training of future specialists. For example, such theoretical technologies can include the “school of dialogue of cultures”: this technology emphasizes dialogue between different historical eras and free communication between students and teachers in the process of education and training (Andersone, 2020). During such communication, participants express their views on the world and themselves in it. The goal of this dialogue can be achieved only when the clash of different views, disputes, and unity of opinions and assessments are constantly accompanied by the internal dialogue of the individual.

To a certain extent, only the last two types can be considered true innovations, which aim to form new essential characteristics for both the subjects of the innovative educational process and to obtain new results. At the same time, given the wide experience of using innovative technologies in European countries in the field of training specialists in the field of culture and arts, this problem will require additional consideration.

3.2. Educational technologies in the training of cultural and artistic professionals in the EU

In European countries, modern art education technologies are in line with current globalization and digital trends in society. It has been proven that digital technologies improve the quality of learning, promote critical thinking and digital literacy in students (see Figure 2).

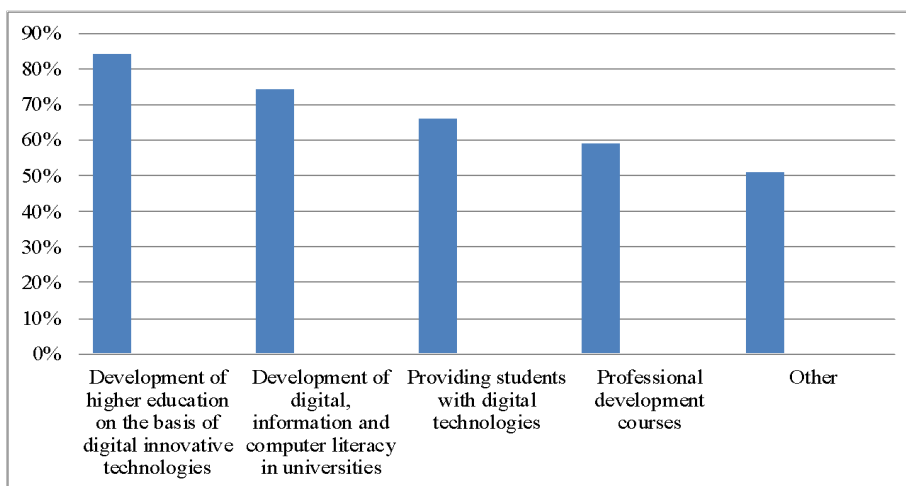


Figure 2 Main directions of digital competencies development in the field of digital innovative technologies in OECD countries, %.
 Source: Adapted from: OECD Digital Economy Outlook (2017)

Accordingly, the development of higher education based on digital innovative technologies is a relevant area of digitalization in the leading countries of the world. OECD countries have focused on enhancing digital literacy among citizens, including basic digital skills such as using computers, navigating the internet, and understanding digital tools. This foundation is crucial for all individuals to participate effectively in the digital society. Integrating digital skills into the education system has been a priority. OECD countries have worked on incorporating digital tools and innovative technologies into teaching and learning practices to enhance students' learning experiences and future employability. OECD countries have promoted initiatives to upskill and reskill the labor force, ensuring that workers are equipped with the digital competencies required by employers and industries. European art universities and academies are actively using means and methods of collective, modular, integrative, and developmental learning (See Table 1).

In general, interactive learning is formed as a series of interdependent complex (problematic) situations and affects the development of collective interaction of students. This affects the emergence of an atmosphere of trust and cooperation among students. On the other hand, systemic differentiation training allows for the implementation of a personality-oriented approach, satisfying the capabilities of each participant in the educational process. At the same time, EU art universities pay considerable attention to research-based learning technologies. The main goal of such methods is for students to gain research experience. Accordingly, many students of modern EU educational institutions spend a lot of time on independent research work (Popyuk, 2020).

In France, the training of specialists in the field of culture and arts is based on a modular system. Every year, future specialists in the field of culture and arts can receive official documents (diplomas, certificates) that allow them to enter the labor market as a specialist in a particular field (technique) without fully completing their studies. This model of education is characterized by certain principles of program design at universities or specialized art schools. At the same time, modules (or blocks) in French art universities are formed to fulfill the basic requirements of professional training of an art specialist of the future. This experience is useful for other EU countries, as such a modular system allows for a flexible response to the needs



of the current labor market and promotes the development of motivation to find a job among young people. The importance of certain curricula lies in the specifics of the content. In particular, the quantitative indicators of such a form of educational work as pedagogical practice can vary (depending on the discipline) from 0 to 50% (Lavrentieva et al., 2023).

Table 1 Innovative forms of training for culture and art professional.

Developmental learning	It involves focusing the content, methods, principles, and techniques of teaching on achieving the effectiveness of the development of students' cognitive abilities (memory, thinking, perception, imagination, etc.).
Integrative learning	Developing dialogic, cooperative relationships between students and teachers. Learning is based on interconnected problems and usually involves teamwork.
Level-differentiated training	Formation of training that maximally satisfies the needs for cognition and development of the acquired knowledge of each student.
Modular training	One of the types of personality-oriented learning, the study of educational material is carried out with the help of didactically expressed blocks-modules that are meaningfully combined with each other.
Collective learning	This type of training allows you to develop teamwork and individuality in group work.
Experiential learning	Gaining experience in organizing and conducting research. This form of education influences the development of critical and analytical thinking and creativity.

New effective tools that promote the creative and personal development of future specialists in the field of culture and art are especially important for the modern practice of art education (Popyuk, 2020; Alarcón López et al., 2021). Among these tools, special attention should be paid to student project activities, which are actively used in France, Germany, Latvia, Poland, and Ukraine. Project-based methods are widely used in art education in the EU. They help future professionals gain important experience in solving both complex and creative tasks. Such educational projects are divided into individual and collective projects. While individual projects develop students' sense of responsibility and self-organization, collective projects enable each participant in the learning process to become an important subject of collective creative activity (Stevens, 2000). This is exactly the kind of collective "brainstorming" associated with the formation of a creative idea, filling it with specific, precise details, working out how to implement the idea, and logical thinking. Accordingly, all of these educational, developmental, and creative tasks are successfully implemented in collective project activities. Nevertheless, we believe that the collective process as a whole does not deprive students of the opportunity to show their individuality, creativity, their personal vision of methods and means of solving a complex issue, while at the same time, the use of project work develops internal collective interaction. In general, collective learning methods contribute to the improvement of communication skills, soft skills, while they also focus on the development of each participant's "specialization", taking into account their special qualities, skills, creative experience, the most acceptable and acceptable types or forms of professional work.

Other methods of work, such as brainstorming, organizing discussions, debates, allow future specialists in the field of culture and art to jointly seek the best solution to a certain complex problem, argue their opinions, understand and accept the arguments of their opponents, etc. At the same time, these methods of organizing learning require special attention and supervision from teachers; the teacher should show criticality and creative thinking through the prism of supporting students' creativity. At the same time, the teacher should provide favorable conditions for students to show initiative, independence, creativity, and authorship when creating a plan and implementing it. In the EU countries, considerable attention is paid to the development of students' initiative, independence, and creativity, so an important task of the teacher is not to "extinguish" the students' initiative, but to preserve the authorship of the project (Baldacchino & Vella, 2013). Thus, the teacher should not impose his/her opinion or vision of the creative task and methods of its solution, at the same time, he/she should not constrain the activity and emancipation of his/her young generation of artists.

Given the current trends in digitalization, EU countries pay special attention to the development of information literacy and digital competence among students. In Germany, culture and arts education is based on the development of multicultural and digital competencies among all participants in the educational process. In particular, the Berlin University of the Arts, which houses the Faculties of Fine Arts, Design, and Music, is actively implementing digital technologies. In particular, the Faculty of Design focuses not only on the formation of creative abilities but also on the development of information competence among students. The following disciplines are taught here: "visual communication and thinking", "art and media", "information culture", "business and social communication", etc. (Lavrentieva et al., 2023). An important practice for developing communication, social, business skills, practical and theoretical knowledge is the organization of various popular science conferences, debates, open lectures and seminars, and summer schools, where students can develop both their theoretical knowledge and practical skills. At the same time, more than 10 million young Germans take part in artistic and cultural seminars, projects, competitions, or other events organized by the Bundesvereinigung Kulturelle Jugendbildung (BKJ) - the German Union of Federal Associations for Cultural Education of Youth.

In the Netherlands, the main focus of training of cultural and artistic professionals is on the use of personality-oriented approaches, which actively use the case method, project technology, research-based learning, etc. Students of Dutch universities receive relevant digital, creative, and multicultural competencies. At Maastricht University, where the Faculty of Arts and Social Sciences is located, students are taught to organize current and traditional techniques, forms of art-making through the use of modern digital, innovative portals, resources, platforms, applications, etc. The main disciplines of the Faculty of Arts and Social Sciences are aimed at gaining important knowledge of the use of modern integrative technologies, digital resources, analysis of artistic technical and software tools, orientation in various innovative applications, and conducting traditional and contemporary art with the help of modern resources (Lavrentieva et al., 2023). On the other hand, the University of Latvia has a Faculty of Education, Psychology, and Art, where the main focus is on the formation of practical skills in future specialists in the field of culture and art. At the same time, Latvia focuses on the synthesis of the principles of education, art, and psychology through the introduction of innovative methods (Andersone, 2020).

The innovation of the educational program of the University of Paris and Pantheon-Sorbonne is also in defining a new direction of graduate training and building a new system of training based on a modular system, in updating the methods, forms, and technologies of education on a modern scientific and methodological basis. At the same time, the Faculty of Art of this university actively uses humanitarian technologies, which are methods of active interaction in human society. They integrate the interdisciplinary knowledge accumulated by the sciences of humanity - history, philosophy, ethics, law, cultural studies, psychology, etc.

At the same time, a characteristic feature of the professional training of specialists in the field of culture and art is a comprehensive training in three areas: general art, professional, and humanities (Bondar et al., 2019). At the same time, updating the content and methods of organizing training, in general, contributes to improving the efficiency of the educational process and activating students' creativity. The multidisciplinary nature of future specialists is assessed not only by the possession of hard skills, i.e., thorough theoretical knowledge, partially practiced but also by soft skills (Reid, 2020; Engwall, 2020; Tsekhmister, 2023). The importance of the latter has been rightly noted by a number of researchers (e.g., Hsia & Hwang, 2021; Gourlay 2020), as the ability to collaborate with others is partly in the foreground, given the multicultural nature of the world and the availability of digital technologies. However, current research shows that not all countries have an appropriate level of access to the Internet (Krynytsia, 2018). This problem is also mentioned in passing in Cobo and Rivas (2023) (see Figure 3).

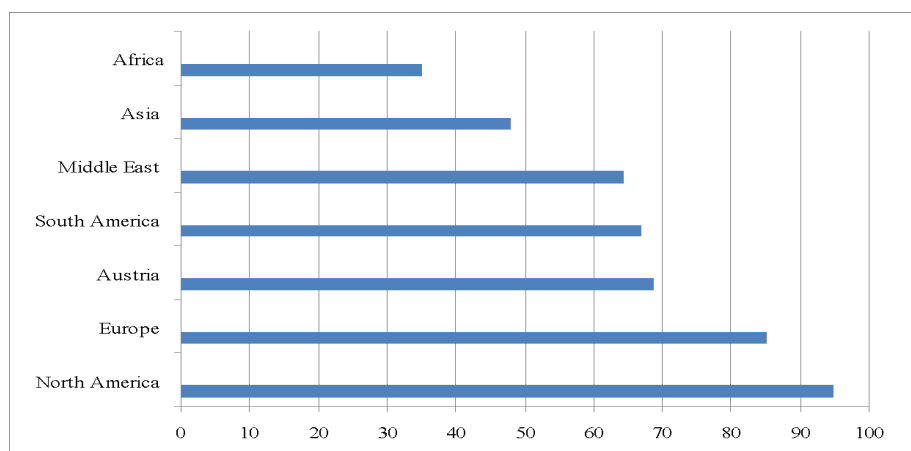


Figure 3 Rankin of the world's regions by the level of Internet coverage.

Source: Adapted from: "State policy of digitalization of the economy of Ukraine" by Krynytsia (2018)

Accordingly, the further development of digital education is linked to improving access to the Internet around the world (Zawacki-Richter & Jung, 2023). Generally, developed regions, such as North America, Western Europe, and parts of East Asia, have high levels of internet coverage. These areas tend to have advanced technological infrastructures and high rates of internet penetration among their populations. Some regions with emerging economies, like parts of Southeast Asia, Latin America, and Eastern Europe, have seen significant growth in internet coverage in recent years. As these regions continue to develop, there is an increasing focus on improving digital infrastructure and expanding internet access to more remote and rural areas. While internet coverage has expanded rapidly in many parts of the world, a global digital divide still exists. This divide refers to the disparities in internet access and usage between developed and developing regions, as well as between urban and rural areas. Addressing the digital divide remains a significant challenge for policymakers and organizations seeking to promote digital inclusion and equitable access to information and education.

4. Discussion

According to Boichenko et al. (2021), in the context of active scientific and technological progress, which is a consequence of the development of science and technology and the process of generating new knowledge, fundamental

information, and technological changes are taking place, in which digitalization plays an almost key role. At the same time, the innovative development of art and culture is linked to the challenges of globalization Campbell (2013).

As demonstrated in studies (Ali, 2022; Zhang & Aslan, 2021; Tsekhmister, 2022), digital innovative technologies play an important role in the organization of a modern learning space. They contribute to the formation of relevant competencies, increase students' interest in gaining knowledge (Kostenko et al., 2023). Also, the studies of other modern scholars have proven the effectiveness of digital learning (Aldhafeeri & Alotaibi, 2022; Cavalcanti et al., 2021; Stoika, 2022).

However, the use of modern digital tools requires teachers to have the appropriate competencies and skills (Conte et al., 2019). Tytova and Mereniuk (2022) proved that digital literacy is an important part of the professional training of future specialists. Their study focuses on improving the digital competence of teachers through participation in various professional development courses and webinars (Tytova & Mereniuk, 2022). Cardinal et al. (2020) emphasized the problem of developing and improving curricula in the field of culture and art. Zhang and Aslan (2021) proved that artificial intelligence technologies improve the learning process and influence the effective organization of the digital learning space. Also, the theoretical foundations of professional digital competence formation are covered in Almås et al. (2021). At the same time, Mutibwa (2021), Shin (2017) characterized the current trends in the development of culture and art in general. A possible drawback of these works is the desire to standardize training methods in a globalized context, while in practice the national element is important. Teaching and learning in the field of culture and arts is based on solid folk traditions, the influence of scientific and authorial schools, etc. In such circumstances, global standardization can make all arts standardized. Therefore, training should not be based on a single framework but should take into account the national specifics of university training in each country.

Sun (2022) also drew attention to the use of multimedia technologies in the training of specialists in the field of culture and art. He proves that modern multimedia technologies are an important part of effective learning, they contribute to the visual demonstration of important material (Sun, 2022). Also, studies by Marner and Örtégren (2014); Şova and Popa (2020) have shown that multimedia technologies contribute to the development of creativity: working with drawings in digital form forms multimodal ways for students to use drawings for their own creative purposes. So, technology allows students in the field of culture and arts to access a vast repository of digital resources from all over the world. They can study diverse art forms, historical periods, and cultural traditions without being constrained by geographical limitations. This global access enriches their understanding of different artistic expressions and fosters a broader worldview. Also, digital platforms and online collaboration tools facilitate communication and collaboration among students, educators, and artists from different regions. This interconnectedness promotes cross-cultural dialogue, fosters creativity, and encourages the exchange of ideas and techniques among aspiring artists and specialists.

Thus, digital learning is a separate trend in the development of education. However, despite all the advantages of this model of learning (saving time for preparation, saving material and technical resources, the ability to conduct classes from different parts of the world, attracting a large number of participants, etc.), modern researchers note that in order to fully implement it, students and teachers must have constant access to the Internet (Lebid et al., 2021). Since digital learning is usually delivered through standardized courses and programs, it can be difficult to ensure an individualized approach to learning and to take into account the needs of each student. Modern learning in the field of arts and culture is highly individualized. From this point of view, the transition to generalized and non-personalized forms of educational services may be harmful in the long run. The formation of a personal learning trajectory is also positively perceived by employers, whose importance in the employment of future graduates of master's and bachelor's programs is extremely high.

Aljad (2023) identifies forms of collective and integrated learning among the methods of improving the quality of teaching artistic disciplines. According to Bondar et al. (2019), an integrated approach to the professional training of future art specialists includes historical, cultural, artistic, and technological aspects, which ultimately contribute to the integrative learning of the future specialist. In the study by Liubarets et al. (2022), the formation of transversal competencies - skills that are articulated within a broad base of acquired skills that meet the requirements of the latest technological advances - plays a crucial role in the training of future specialists. Transversal competencies are important for professional career development and success in various fields. They allow for better adaptability and readiness for change, which is especially important in an era of rapid technological transformation and labor market instability caused by both the global pandemic and certain local crises. Transversal competencies can help people develop critical thinking, i.e. the ability to analyze information, make informed decisions, and solve complex problems - important qualities that modern employers demand. Educational technologies enable the implementation of personalized learning approaches tailored to individual students' needs and learning styles (Kostenko et al., 2023). This adaptability allows students to progress at their own pace, explore their interests, and focus on specific areas of culture and arts that align with their passions. At the same time, digital platforms and e-portfolios provide students with opportunities to showcase their artistic works and achievements to a wider audience. This exposure can open doors to professional opportunities, networking with potential employers, and accessing a global audience.

An important area of creativity development for art students in EU countries is the development of design thinking skills. The theoretical foundations of using the design approach in the training of future specialists are covered in (Fields & De Jager, 2022). Modern research has shown that design thinking contributes to a quick, flexible response to solving complex problems, developing creativity, uniqueness, and forming original, atypical approaches (Marantz Cohen & Mule, 2019; Talbot, 2022,

Quinn et al., 2012). At the same time, while design thinking can be a useful tool for solving complex problems and developing new innovative products, it can also face some challenges. First of all, it is a misunderstanding of the concept itself. In particular, in some cases, people may misunderstand what design thinking is and how to apply it. This can lead to the process being inappropriate or not producing the expected result. It is also worth paying attention to the lack of time and resources, as the creative process of its implementation is quite costly and requires a longer time frame. A possible way to overcome this drawback is to work in a team, which will not only allow you to work out the general tools of design thinking but also improve the development of social skills.

According to researchers, one of the important trends in the development of general art education in the European Union is the integration of its content components with almost all traditional “serious” disciplines, such as social sciences, language, physical and mathematical sciences (Kárpáti, 2019). In the United Kingdom, for example, the arts are integrated into academic disciplines such as language and literature, history, and information and communication technologies. In addition, dance, music, and movement are part of the physical education curriculum in the UK and Norway, and in Germany, music is taught as “music and movement” or “music and sport” in primary school. The specificity of drama makes it possible to integrate it with other academic disciplines (Schneider & Rohmann, 2021). For example, in schools in the UK, “drama” is taught as an independent subject and as an aestheticized form of studying other disciplines, such as language and literature, history, and cultural history.

In Sweden, drama is taught as an integrated part of literature, while in Norway, plastic arts and crafts are integrated with the study of Christianity and other religions, and music, lyrics, and drama are integrated with language and literature, history, civics, and other disciplines.

The integration of academic disciplines in modern conditions is an integral part of the innovation of the educational system. We should agree with the researchers who defend the importance of combining disciplines, not to save money or reduce the number of teachers and students, but because of the importance of the multifaceted development of modern specialists, especially when it comes to such an important socio-humanitarian field of knowledge as the study of culture and arts (Sickler-Voigt, 2019). Integration of disciplines can provide more interest for students, as they can see how different aspects of a topic interact with each other and how they can use knowledge from different disciplines to solve problems. It can also reduce the number of individual courses and make them more focused on specific topics. This can help reduce the workload of students and ensure more efficient use of time. On the other hand, it is also said to improve the interaction between teachers and students: Integration of disciplines can provide an opportunity for deeper interaction between these participants in the educational process, as they can work together on different aspects of a topic. It facilitates the integration of theoretical knowledge with practical application. For example, students in the performing arts can use digital tools to record, analyze, and refine their performances, enhancing their skills and understanding.

For the Ukrainian education system, such innovations seem to be surprisingly relevant. The Ukrainian education system is quite conservative, which also affects the teaching of artistic specialties and cultural studies. The presence of other disciplines is partly nominal (for example, the history of Ukraine, which is actually incorporated with the history of Ukrainian art), and sometimes students are offered highly specialized disciplines. The way out of this situation could be to create broader courses that cover several subjects and integrate them into a single whole. At the same time, it is not so much a matter of mechanical unification as a thoughtful transformation of the educational system.

Based on such a framework, the use of innovative educational technologies will have a much greater effect in teaching, as the importance of this element has long been underestimated in Ukrainian realities. Innovative educational technologies play a pivotal role in transforming the way specialists in the field of culture and arts are trained. By providing immersive experiences, global connectivity, personalized learning paths, and seamless integration of theory and practice, these technologies empower students to become skilled, adaptable, and culturally aware professionals in their chosen artistic domains.

5. Final considerations

Therefore, modern innovative educational technologies play an important role in the training of specialists in the field of culture and arts. As the analysis of the best practices of the European experience has shown, current trends in innovative learning are based on the perception of fresh ideas, openness, foresight, and a permanent reassessment of values. Today, the development of the system and content of culture and arts education requires taking into account the mass nature and continuity of education. These trends define the main function of education in human development:

1. The actual means and methods actively used in European art universities and academies are collective, modular, integrative, and developmental. Special attention should be paid to digital technologies and training used in distance learning.
2. For the modern practice of art education, it is extremely important to apply new effective methods that promote the creative and personal development of future professionals in the field of culture and art. Among these methods, special attention should be paid to students' project activities, which are successfully used in combination with digital technologies and distance learning. Teaching and learning in the realm of culture and arts draw upon rich folk traditions, the impact of scientific and individual artistic schools, and more. In this context, implementing global standardization could risk homogenizing

all art forms. To preserve the unique essence of artistic expression, training should avoid rigid conformity to a single framework and instead acknowledge and respect the national nuances and specificities of university education in each country. Embracing diversity and recognizing cultural distinctiveness will ensure the continued vibrancy and authenticity of arts education across the globe.

3. At the same time, an important challenge for Ukrainian realities is the possibility of using integration as an effective means of supporting innovative teaching methods in the field of culture and arts. By integrating disciplines, students can find more interest in their studies, as they witness the interconnectedness of various aspects within a subject and learn how to apply knowledge from different fields to address challenges. This approach can lead to a consolidation of courses, allowing for a more targeted focus on specific topics, thereby reducing the students' workload and optimizing their time effectively. Moreover, the integration of disciplines fosters improved interaction between teachers and students. By collaborating on different facets of a subject, participants in the educational process engage in deeper interactions, enhancing the overall learning experience.

4. The study was limited, in particular, by the lack of statistical materials on the domestic Ukrainian labor market in the field of training specialists in the field of culture and arts.

5. Promising areas for further research include ways to integrate academic disciplines in courses in cultural studies and art history. In the context of the Ukrainian education system, these innovations appear strikingly pertinent. The system itself tends to be more traditional, influencing the approach to teaching artistic disciplines and cultural studies. Some disciplines may exist in name only, like combining the history of Ukraine with Ukrainian art, while others may be overly specialized. To address this situation, a viable solution could be the development of comprehensive courses that encompass multiple subjects and seamlessly integrate them into a cohesive framework. This approach should not be merely a mechanical unification, but a deliberate transformation of the educational system, carefully considering how subjects can complement and enrich one another.

Ethical Considerations

Not Applicable.

Conflict of Interest

The authors declare no conflict of interest.

Funding

The current review did not receive any financial support.

References

- Alocón López, C., Decuyper, M., Dey, J., Gorur, R., Hamilton, M., Lundahl, C., & Sundström Sjödin, E. (2021). Dancing with Covid: Choreographing examinations in pandemic times. *European Educational Research Journal*, 20(4), 403–422. <https://doi.org/10.1177/147490412111022130>
- Alhafaeri, F. M., & Alotaibi, A. A. (2022). Effectiveness of digital education shifting model on high school students' engagement. *Education and Information Technologies*, 27(5), 6869–6891. <https://doi.org/10.1007/s10639-021-10879-4>
- Ali, S. (2022). The effectiveness of immersive technologies for future professional education. *Futurity Education*, 2(2), 13–21. <https://doi.org/10.57125/FED/2022.10.11.25>
- Aljad, R. R. (2023). Methods to improve the effectiveness and quality of teaching the disciplines of the architectural and artistic profile (experience of Libya). *Futurity Education*, 3(1), 96–117. <https://doi.org/10.57125/FED.2023.25.03.08>
- Almås, A. G., Bueie, A. A., & Aagaard, T. (2021). From digital competence to Professional Digital Competence: Student teachers' experiences of and reflections on how teacher education prepares them for working life. *Nordic Journal of Comparative and International Education (NJCIE)*, 5(4), 70–85. <https://doi.org/10.7577/njcie.4233>
- Andersone, R. (2020). Innovations in the improved curriculum content of the competence approach: A case study in Latvia. *Rural Environment. Education. Personality (REEP)*. DOI: 10.22616/leep.2020.025
- Baldacchino, J., & Vella, R. (2013). *Mediterranean art and education: navigating local, regional and global imaginaries through the lens of the arts and learning*. Springer Science & Business Media. <https://www.semanticscholar.org/paper/Mediterranean-art-and-education%3A-navigating-local%2C-Baldacchino-Vella/39111882a807b28a66fe49002a4f7dfb14b33266>
- Boichenko, E., Martynovych, N., Shevchenko, I. (2021). Cognitive modeling concepts of sustainable development of society. *Problemy Ekorożwoju*, 16(2), 158–165. <https://doi.org/10.35784/pe.2021.2.16>
- Bondar, I., Gumenyuk, T., Udriş-Borodavko, N., Penchuk O. (2019) Entrepreneurship model for creation of designer competences in the process of professional training. Abacademies.org. Retrieved October 4, 2023, from <https://www.abacademies.org/articles/Entrepreneurship-model-for-creation-of-designer-competences-1528-2651-22-6-482.pdf>
- Campbell, P. S. (2013). Creative Arts, Education, and Culture in Global Perspective. In *Landscapes: the Arts, Aesthetics, and Education* (pp. 3–13). Springer Netherlands. DOI: 10.1007/978-94-007-7729-3_1
- Cardinal, M. K., Rogers, K. A., & Cardinal, B. J. (2020). Inclusion of dancer wellness education programs in U.s. colleges and universities: A 20-year update. *Journal of Dance Medicine & Science: Official Publication of the International Association for Dance Medicine & Science*, 24(2), 73–87. <https://doi.org/10.12678/1089-313x.24.2.73>



- Cavalcanti, A. P., Barbosa, A., Carvalho, R., Freitas, F., Tsai, Y.-S., Gašević, D., & Mello, R. F. (2021). Automatic feedback in online learning environments: A systematic literature review. *Computers and Education: Artificial Intelligence*, 2(100027), 100027. <https://doi.org/10.1016/j.caeai.2021.100027>
- Cobo, C., & Rivas, A. (Eds.). (2023). *The New Digital Education Policy Landscape: From Education Systems to Platforms*. Taylor & Francis.
- Conte, E., Habowski, A. C., & Rios, M. B. (2019). Ressonâncias das tecnologias digitais na educação. *Revista Ibero-Americana de Estudos Em Educação*, 14(1), 31–45. <https://doi.org/10.21723/riaee.v14i1.11110>
- Engwall, L. (2020). The future of universities. In *Higher Education Dynamics* (pp. 193–207). Springer International Publishing. DOI: 10.1007/978-3-030-41834-2_12
- Fields, Z., & De Jager, C. (2022). The Educational Design Ladder and design thinking pedagogy: A customised training programme for creative problem-solving. *Journal of Contemporary Management*, 19(2), 135–156. <https://doi.org/10.35683/jcm21075.162>
- Gourlay, L. (2020). *Posthumanism and the digital university: Texts, bodies and materialities*. Bloomsbury Publishing.
- Hsia, L.-H., & Hwang, G.-J. (2021). Enhancing students' choreography and reflection in university dance courses: A mobile technology-assisted peer assessment approach. *British Journal of Educational Technology: Journal of the Council for Educational Technology*, 52(1), 266–287. <https://doi.org/10.1111/bjet.12986>
- Kárpáti, A. (2019). Art Education in Central and Eastern Europe. In *The International Encyclopedia of Art and Design Education* (pp. 1–17). Wiley. <https://doi.org/10.1002/9781118978061.ead107>
- Kostenko, L., Ruda, O., Sofilkanych, M., & Bokshan, A. (2023). Distance learning as an integrative response to contemporary challenges. *Futurity Education*, 3(1), 151–164. <https://doi.org/10.57125/FED/2022.10.11.12>
- Krynytsia, S (2018). State policy of digitalization of the economy of Ukraine. <https://ofp.cibs.ubs.edu.ua/files/1803/18ksoteu.pdf>
- Lavrentieva, N., Spolska, O., Korol, O., Markovskiy, A., & Tkachenko, V. (2023). Higher art education in the European Union: Innovative technologies. *Eduweb*, 17(2), 234–243. <https://doi.org/10.46502/issn.1856-7576/2023.17.02.20>
- Lebid, Y., Sinelnikova, V., Pistunova, T., Tormakhova, V., Popova, A., & Sinenko, O. (2021). Organization of qualitative education of music students in the conditions of distance education. *Postmodern Openings*, 12(3Sup1), 76–93. <https://doi.org/10.18662/po/12.3sup1/352>
- Liubarets, V., Bakhmat, N., Kurylo, L., Spitsyna, A., & Biriukova, O. (2022). Formation of transversal competences of future economists in the conditions of digital space. *Journal of Higher Education Theory and Practice*, 22(14), 67–80. DOI: 10.33423/jhetp.v22i14.5536
- Marantz Cohen, R., & Mule, L. (2019). Collaborative pedagogy in a design thinking education course. *Insight*, 14, 29–42. <https://doi.org/10.46504/14201902ma>
- Marner, A., & Örtengren, H. (2014). Education through digital art about art. *International Journal of Education through Art*, 10(1), 41–54. https://doi.org/10.1386/eta.10.1.41_1
- Mutibwa, D. H. (2021). Contemporary expressions of arts and culture as protest: consonance, dissonance, paradox and opportunities for community development? In *Arts, Culture and Community Development* (pp. 89–110). Policy Press. DOI: 10.1332/policypress/9781447340508.003.0006
- Poplavskiy, M., Rybinska, Y., Ponochova-Rysak, T. (2020). The specific of synesthesia in contemporary American and English poetry and its impact on the reader. *Cogito*, 12(3), 297–315. <https://www.proquest.com/openview/a656ffc33729ddf773ba6d115540c427/1?pq-origsite=gscholar&cbl=1316371>
- Popyuk, I. (2020). Integration of art education in Ukraine and Europe in the late xxth to early xxist century (by way of example of artistic metalworking). In *Innovative scientific researches: European development trends and regional aspect*. Publishing House "Baltija Publishing." DOI: 10.30525/978-9934-588-38-9-49
- Quinn, T. M., Ploof, J., & Hochtritt, L. J. (Eds.). (2012). *Art and Social Justice Education: Culture as Commons*. Routledge. <https://doi.org/10.4324/9780203852477>
- Reid, E. A. (2020). New pedagogical directions. In *Changing Australian Education* (pp. 254–270). Routledge. DOI: 10.4324/9781003115144-15
- Schneider, V., & Rohmann, A. (2021). Arts in education: A systematic review of competency outcomes in quasi-experimental and experimental studies. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.623935>
- Shin, R. (Ed.). (2017). *Convergence of contemporary art, visual culture, and global civic engagement*. IGI Global. DOI: 10.4018/978-1-5225-1665-1
- Sickler-Voigt, D. C. (2019). The choice-based art curriculum. In *Teaching and Learning in Art Education* (pp. 23–40). Routledge. DOI: 10.4324/9781351000963-2
- Şova, R.-A., & Popa, A. F. (2020). Accounting education – between digitalisation and the COVID-19 pandemic crisis. *CECCAR Business Review*, 1(11), 59–63. <https://doi.org/10.37945/cbr.2020.11.07>
- Stevens, S. (2000). Choreographic Pedagogy in Higher Education: Learning from practitioners. *Research in Dance Education*, 1(1), 87–91. <https://doi.org/10.1080/14647890050006604>
- Stoika, O. (2022). The digital transformation of higher education in Hungary. *Neperervna Profesijna Osvita: Teoria i Praktika*, 3, 90–95. <https://doi.org/10.28925/1609-8595.2022.3.12>
- Sun, Y. (2022). Teaching of dance choreography course based on multimedia network environment. *Journal of Environmental and Public Health*, 2022, 1–10. <https://doi.org/10.1155/2022/8627822>
- Talbot, A. V. (2022). Mastering the fundamentals of design thinking by teaching the skills of improvisation. In *Design Thinking in Education* (pp. 25–36). Springer International Publishing. DOI: 10.1007/978-3-030-89113-8_3
- Trach, Y., Tolmach, M., Chaikovska, O., & Gumeniuk, T. (2020). Problems of cultural heritage preservation in the context of the armed conflict growth. In *IFIP Advances in Information and Communication Technology* (pp. 31–44). Springer International Publishing. DOI: 10.1007/978-3-030-48939-7_4
- Tsekhmister, Y. (2022). Effectiveness of Practical Experiences in Using Digital Pedagogies in Higher Education: A Meta-Analysis. *Journal of Higher Education Theory and Practice*, 22(15). <https://doi.org/10.33423/jhetp.v22i15.5567>
- Tsekhmister, Y. (2023). Effectiveness of case-based learning in medical and pharmacy education: A meta-analysis. *Electronic Journal of General Medicine*, 20(5), em515. <https://doi.org/10.29333/ejgm/13315>
- Tytova, N., & Mereniuk, K. (2022). Digital literacy of future teachers in the realities of large-scale military aggression (Ukrainian experience). *Futurity Education*, 2(3), 43–54. <https://doi.org/10.57125/FED/2022.10.11.33>
- Zawacki-Richter, O., & Jung, I. (Eds.). (2023). *Handbook of Open, Distance and Digital Education*. Springer Nature Singapore. <https://doi.org/10.1007/978-981-19-2080-6>



Zhang, K., & Aslan, A. B. (2021). AI technologies for education: Recent research & future directions. *Computers and Education: Artificial Intelligence*, 2(100025), 100025. <https://doi.org/10.1016/j.caeai.2021.100025>

