ART PEDAGOGY

THE DIGITAL SHIFT IN ART EDUCATION: BALANCING TRADITION, INNOVATION, AND INTEGRATION
Case study: Department Of Art Education, Abai Kazakh National Pedagogical University, Kazakhstan

Masoumeh Shiri[1], Karim Baigutov[2]

[1,2]Abai Kazakh National Pedagogical University
(Almaty, Kazakhstan)

Abstract. The digitalization of education has become an essential aspect of modern teaching and learning, significantly influencing instructional methods and student engagement. This article examines the digitalization methods of art education at the university where the study is being conducted to clarify teachers' perspectives. The study employs a descriptive-analytical research approach and utilizes a questionnaire with 23 items, including a Likert scale and open-ended questions, to collect quantitative and qualitative data. The data analysis results indicate that teachers hold a positive and satisfactory view of blended teaching methods. While they exhibit significant weaknesses in utilizing personalized technological teaching approaches, they assess student learning outcomes as appropriate and effective when combining traditional and digital teaching methods and online education.

Through coding the questionnaire results, two charts were designed to illustrate the advantages and disadvantages of using digital technologies. Given that educators, students, and educational

institutions have diverse perspectives on the digitalization of education, examining the integration of traditional and digital teaching methods is strategic and highlights the necessity of addressing the viewpoints of these three groups. The primary concern of this article is bridging the gap between traditional art education and technology-based art education. While the findings suggest that the benefits of integrating technology into art education outweigh its drawbacks, further exploration of its implementation remains essential.

Introduction

The inclusion of digital technologies into art education has been a significant issue over the last few decades. However, traditional art education, which has always emphasized hands-on techniques, individual expression, and a broad knowledge of artistic materials, is facing new opportunities and challenges in the face of digital tools that fundamentally change the modes of learning and making. In the context of ancient and first-person-oriented learning experiences, digitization raises questions about how technology may provide opportunities for new pedagogy.

This transition is motivated by many reasons, such as the fast-paced evolution of technology, the rising popularity of digital literacy in modern society, and the necessity for more accessible and adaptable educational settings. Digital education tools are being made in response to the unfolding of digital life. As digital teaching resources and methods are becoming part of everyday work, this may lead to their adoption in art. However, this digital transformation also presents

concerns regarding the protection of conventional art forms, its influence on creativity, and the role of technology in defining the future of creative expression. Art education has always been a field of study negotiated between the old and the new. Art teaching and learning methods have continually evolved, but creativity, technique, and critical thinking remain integral principles. Power poses a crucial role, while the digitalization of art education is vital to this evolution and brings both opportunities and risks. It is necessary to explore how these digital tools help to improve, supplement, or replace the old teaching methods and what this conversion means for teachers and students.

In modern society, education has increasingly led to the learning of technology and digital capacity. It has become essential to developing a knowledge-based, creative, and digital economy. Students are thought to be skilled when they are exposed to new technologies, but skill development of this type is shorter-lived due to the ever-quickening pace of technological changes. This is one of the key components of

the education concept (Qureshi et al.). Therefore, the extent to which technology is being applied, especially with students submerged in digital technologies since birth, is constantly being evaluated and further developed. This has reached the point that education technology is now an expectation instead of a privilege (Barbour). One essential element of preparing a modern professional is the digitization of education. Alongside these trends, there are more and more interdisciplinary studies and projects and an increase in the volume and significance of information. Studies show that educators and students today recognize the necessity of enhancing their competencies in artificial intelligence, big data processing and analysis, and information and communication technologies (Marrone et al.; Sangapu; Grájeda, Burgos, et al.; Shiri and Baigutov; Lin and Chen; Stambekova et al.; Zhazira et al.). Consequently, introducing new approaches and analyzing their positive and negative aspects has become critically important in the art education system. This analysis is essential for transforming teaching styles and integrating new technologies and modern methods (Alenezi et al.).

Digital education can create new learning opportunities for art students. Art students can access media, personalized instruction, various new digital technologies, and creative and engaging strategies in digital and online learning environments. Hughes and Roblyer suggested several approaches, as well as overarching technological applications in visual arts education, such as production and manipulation of digital images; graphic design, 3D modeling, and desktop publishing support; virtual art museum field trips; film as an art form; use of computer-controlled kilns; and use of digital means of sharing students' creative and research work.

Problem Statement

There are advantages and disadvantages to the digitization of art education. Digital technology integration raises important issues regarding balancing tradition and innovation, even though it may improve art education. Traditional educational models historically emphasizing physical techniques and hands-on artistic practice are challenged by the move toward digital tools and platforms in art education. The impact of digitization on students' creative development, skill acquisition, and depth of creativity is still unknown. Concerns about accessibility, the digital divide, and the possible loss of important traditional skills are also raised by the increasing use of digital tools.

The central issue addressed in this study is whether integrating digital technologies in art education enhances the learning experience or diminishes the core values and techniques that have historically defined art education. This study's importance stems from its applicability to the changing demands of contemporary education and the arts. Art education must stay current and valuable as digital technologies influence many fields. Preserving the rich legacy of classical art and giving students the tools they need to succeed in a technologically advanced world requires an understanding of balancing traditional artistic techniques and cutting-edge digital tools. In doing so, this research could lend insight into a harmonious fusion of the concepts of tradition and innovation that could benefit both its educators and the students that they instruct, as well as the field of art education. Recognizing the effect of this change is key to creating a more traditional and digital education program.

Objectives

Considering the worldwide importance of education digitalization and its increasing role in Kazakhstan, many initiatives have been launched, and some programs have been designed nationally. Hence, analyzing the gap between traditional and digital means of teaching

can be insightful for plans. In light of the significance of this theme and the case study college, this study is guided by the following research questions:

-What are the differences between traditional art education and digitalized art education?

-What are the methods for digitalizing art education in the university under study?

-What are the benefits and challenges of using digital tools in art education?

This study aims to collect and thoroughly analyze pertinent and valuable data regarding the nature of technology-driven art education. Integrating digital technologies into art education will be easier and more efficient if this information is made available to educational institutions, teachers, and students. The study also aims to present a comprehensive viewpoint on the topic, explain the state of technology in art education today, and impartially point out its benefits and drawbacks.

Background

Digitization of Art Education: Today's Need, Tomorrow's Requirement

Art education has undergone significant transformations due to the pervasive influence of technology in all aspects of life. Given the inherently creative and progressive spirit of artists throughout history, the inclination of contemporary artists to break boundaries and utilize digital technologies in creating art is inevitable. A modern artist seeking to develop using innovative methods must be trained in these new approaches. Digital art education opens new learning opportunities by introducing students to online and digital environments while transforming teaching methods through blended courses, personalized learning, new collaborative models, and a wide range of creative and engaging learning strategies. To be sure, the 21st-century rendering of learner success stipulates that students must be critical consumers of digital art and be able to collaborate and create digital art media

effectively. That means developing their capacity to showcase skills, network artistically, and advance artistic ideas via impactful storytelling, visualization, and content curation.

Before explaining the strategies for transitioning art education to a digital format, one must first outline the fundamental differences between digitalized and traditional art education approaches.

The Differences Between Traditional Art Education and Digitalized Art Education

Education aims to simplify, standardize, and speed up knowledge transfer. Accordingly, traditional and digital approaches aim to consider the quality and quantity of education. The introduction of multimedia technologies and the internet in learning has been widely observed across many universities as a tool to enhance accessibility and the quality of delivery and learning for both students and educators.

Numerous studies have explored the process of digitization in education, including art education, examining its advantages and challenges, uncovering its various aspects, and shedding light on the perspectives of students and educators (Charfeddine and Umlai; Marrone et al.). Technology solutions have more often claimed to result in more collaborative practices than tools used in traditional methods (Dooley et al.). In other words, digitization can transform the traditional teacher-led classroom dynamic into more collaborative practices, where students become engaged and active participants in their learning process. It is worth noting that digital art education, using the latest technologies, seeks to facilitate the teaching and learning process for educators, students, and educational institutions. As the digital literacy of both teachers and students improves, their willingness to adopt and utilize digital tools increases (Shiri and Baigutov). It is important to note that engagement with traditional art education techniques

in painting, sculpture, printmaking, crafts, and other disciplines fosters a deep understanding of artistic foundations and materials (Asare et al.). Because it improves hand-eye coordination and motor skills while creating art, traditional art education, which places an emphasis on hands-on engagement and physical interaction, has many supporters. Additionally, it makes it easier to establish a closer bond with the creative output of earlier generations.

The emergence of digital art tools, including graphic design software, 3D modeling applications, digital drawing tablets, and artificial intelligence, has revolutionized artistic expression by offering solutions that support personalized learning, provide virtual training, and streamline administrative tasks (Grájeda, Córdova, et al.; Flores-Vivar and García-Peñalvo). Another significant advantage of digitalized art education is access to a wide array of resources, which enables students to explore modern artistic styles and methods, fostering the discovery of diverse aesthetic concepts.

Adobe's newsletter highlighted the benefits of affordability and the relative ease of new technologies, contributing to the annual surge in new content creators. The digital tool features have revolutionized traditional approaches and paved a new way for hobbyists to create content. These advancements have redefined monetization, giving rise to new business models in the art industry.

Based on prior research and recent investigations (Sangapu; Tvrdišić; Lin and Chen), the differences between digital art education and traditional art education can be categorized into six primary dimensions: location of education, scheduling, cost, flexibility, and teaching methods, educational content, and social interaction and engagement. (table 1)

Combination of Traditional and Digital Art Education

Given the constant transformations, new media possess their distinct nature and messages regarding various aspects of life, including culture, beliefs, societal values, and education, and digital technologies are no exception. However, more advanced technologies tend to adapt to and integrate with the social and cultural contexts in which they exist more rapidly. Therefore, in the visual arts, and most notably in the creation of artworks using digital technology, as McLuhan once asserted, "the medium is the message." Digital technology has reshaped how messages are created and conveyed (Wilks et al.). The ability to dynamically modify environment features based on user characteristics or a user model is a defining characteristic of adaptive eLearning spaces. The adaptive system dynamically creates a user model based on user behavior. The user is directly involved in updating and making such a model because it may be scriptable and flexible. One could characterize this system as adaptable.

Art education's digitization process includes strategies, applications, and new digital tools and technologies to make education creative and possible in any media, place, and time. Several researchers have tried to offer a collection of strategies and integrated technology applications in Art Education. These are the developments in image creation and slide visuals through graphic design, both 2D and 3D design and modeling, as well as online publishing of artwork in a virtual worldwide gallery. Moreover, they include virtual tours exploring museums and historical sites globally, virtual galleries, movie and motion graphics productions, and much more (Hughes and Roblyer; Wilks et al.). Virtual representations of the world's finest museums can become embedded into the classroom space. However, much of the relevant digital technology (such as photography and film) can be accomplished efficiently without an Internet connection. Understanding that critical pedagogies in the art classroom can be applied to interpreting any event or product, cultural

Core	Traditional education	Digital education
Place of education	- Physical presence in classrooms is mandatory - Traditional learning takes place in a classroom setting	- Classes held face-to-face, virtual or combined - Digital classrooms can be anywhere only through an internet connection - Students from different geographic locations can attend class at the same time - With new digital technologies, the classroom can represent the virtual reality of a museum or historical monuments
Timing of education	- Classes held at specific times - The speed of transferring information to students is lower - Updating information in traditional versions is time-consuming	- Information is available at any time - The speed of data transfer is very high - digital resources can be quickly and easily updated - the student can access the latest information quickly
Costs of education	- There are higher costs incurred with a traditional art classroom (regarding buying materials such as paint, canvas, prints, replicas, etc.) - Forming traditional classes does not require expensive special technological tools	- specific art software comes at a more affordable price than Physical materials and also has unlimited uses - The costs of equipping institutions and organizations with the latest advanced digital technologies (artificial intelligence, virtual reality, Internet of Things, etc.) are very high - Maintaining these digital technologies involves regular expenses - Preparation and training of teachers to use digital technologies, including expenses
Flexibility methods of education	- The practical experience of teaching and creating art takes place (working with colors and materials manually) - Teaching facilities are limited and traditional (black and whiteboard, etc.) - Teaching methods in traditional education are imposed - Teachers have little knowledge about new technologies and cannot meet the needs of students in the field of digital technologies	- Different types of digital technology equipment can be used to teach content-based lessons - Teaching methods can varry, interactive, 3D, or virtual reality compared to the presented content - Practical experience does not take place to teach and create art - Self-motivated students can strive for different methods, strategies, and content of the course and beyond the course
Educational content	- Traditional classroom content is static - The primary source of information is the trainer - There is a comprehensive program for all students (with different abilities).	- There are far more subjects to choose from than in a conventional classroom setting (McNulty) - By personalizing education, it is possible to provide a curriculum for each student according to his abilities - Teachers and students have access to endless and up-to-date sources of information - interactive flat panels allow for dynamic content to be presented in a digital education
Social interaction & Participation	- Working on a group project and interacting with one another are crucial components of the traditional classroom experience (McNulty) - Extensive interaction between teachers and students - Most teachers are monologue	- Students' self-confidence increases in performing interactive activities - Students' self-motivation increases in digital classes, and they are encouraged to search for material beyond the classroom - Interaction between students and teachers and students with each other is less in the virtual classroom - Some students may experience some form of social isolation when participating in an online course

or otherwise. For example, gamification's real possibilities and cumulative potential are pretty extensive. At the moment, an urgent area of research into the possibilities of education digitization (Featherstone and Habgood) and the use of mobile digital educational resources (Деменкова et al.), which should be understood as an organized, controlled, purposeful process of interaction between a teacher and a student using mobile devices, is carried out applying adapted educational content and ergonomics of the corresponding electronic educational resource. As Qureshi et al. state, the advancement of students' and educators' learning skills has increased due to the development of digital technologies and the broader use of the Internet in education.

Methods

Research Design
This study examines digitalization methods' theoretical and practical foundations in art education. To achieve this goal, a descriptive-analytical research approach was employed to collect both quantitative and qualitative data. The research instrument consisted of a questionnaire with 23 distinct items, which was updated based on previous studies and adapted for use in art education. These 23 items covered various aspects, including participants' demographic information, gender, teaching experience, and their perspectives on the digitalization of art education.

Participants
The participants in this study were 22 art faculty members from Abai Kazakh National Pedagogical University, all of whom were actively teaching in the Department of Art. They were carefully selected based on their teaching experience, academic qualifications, and familiarity with digital technologies in art education. The participants ranged in age from 30 to 60, and all had prior experience using digital technologies in their teaching practices.

Research Instrument
The research instrument consisted of a 23-item questionnaire, which was structured into four distinct sections:

- Demographic Information: Participants' personal details, including gender and teaching experience.

- Perspectives on Digitalization in Art Education: Their general opinions regarding adopting digital methods.

- Advantages of Digital Technologies in Art Education: Their perceived benefits of integrating digital tools in teaching.

- Disadvantages of Digital Technologies in Art Education: Their concerns and perceived limitations regarding digital teaching methods.

The questionnaire incorporated a combination of question types, including a five-point Likert scale, binary (yes/no) questions, and open-ended questions to collect both quantitative and qualitative data. The structured questionnaire was designed online and distributed to participants via social media platforms. Participants were assured that all collected information would be kept confidential and used solely for research purposes.

Data Collection and Analysis
The data was collected online, systematically categorized and coded using Excel spreadsheets, and subsequently analyzed using SPSS software. The findings were presented in three charts and one table. To ensure the reliability and validity of the study, Cronbach's alpha coefficient was used to assess the internal consistency of the questionnaire, yielding a reliability score of 0.78, indicating a relatively high level of reliability.

This study was approved by the Ethics Committee of Abai Kazakh National Pedagogical University (Ref No. 12) on 16/03/2024. All participants provided informed consent before participation.

Discussion

The use of digital technologies in education, particularly in art education, is inevitable. In the context of integrating digital technologies into teaching, multiple aspects, such as teachers' skills, willingness, and visual literacy, have been previously examined. As demonstrated by Shiri and Baigutov, teachers believe that introductory training programs are necessary to effectively utilize digital technologies in education. Moreover, their academic rank significantly influences their level of digital literacy and motivation to adopt technological methods in teaching. This study also explored these aspects and revealed that teachers highly favor blended teaching methods combining traditional and digital approaches. Additionally, they perceive implementing blended learning as having a significant positive impact on students' learning outcomes.

Previous research by Shiri and Baigutov suggests that incorporating digital technologies in art education can enhance students' creative ideation and positively influence artistic creation. As emphasized in this study, 70% of teachers expressed satisfaction with students' learning outcomes through blended methods, while 59% reported satisfaction with virtual learning approaches. The disadvantages of integrating digital technologies into art education primarily stem from a lack of familiarity and awareness of these tools and the challenges associated with their use rather than the inherent limitations of the technologies themselves. In contrast, teachers identified numerous benefits of employing digital tools in the educational process. The findings suggest that the advantages of utilizing digital technologies in art education outweigh the disadvantages.

Results

Digitalization Methods in Art Education
Based on the collected data and its analysis, the strategies and methods of digitalizing art education at the studied university can be categorized into three approaches: personalized learning, virtual learning, and blended learning. These interrelated methods may overlap, allowing their integration to address specific educational needs (Figure 1).

Figure 1 clearly illustrates the categorization of digitalization methods in art education. Subsequently, Table 2 presents teachers' perspectives on each of these methods and their level of satisfaction with them. The table indicates that teachers predominantly use blended learning for art education, with an average score of 3.3, and it is also the method that yields the highest student learning outcomes (3.5) compared to other approaches. Conversely, personalized learning is the least utilized method, with an average score of 1.8, corresponding to a lower level of student learning. The teacher satisfaction column reflects their level of approval for each method. As expected, teachers favor

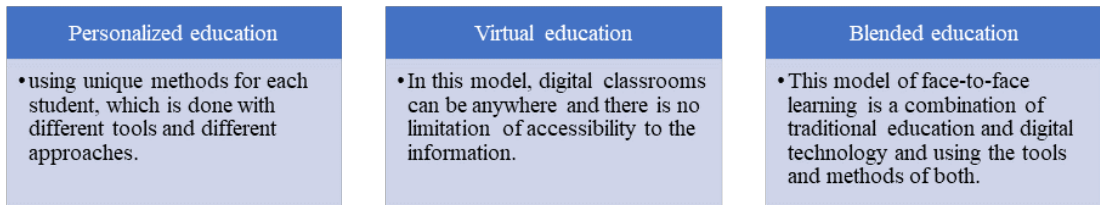| Personalized education	Virtual education	Blended education
• using unique methods for each student, which is done with different tools and different approaches.	• In this model, digital classrooms can be anywhere and there is no limitation of accessibility to the information.	• This model of face-to-face learning is a combination of traditional education and digital technology and using the tools and methods of both.

Figure 1. Methods of digitization in art education

blended learning the most, with an average satisfaction rate of 70%, making it the highest-rated approach for enhancing student learning. (table 2)

- Challenges in teaching creative thinking methods: According to teachers, high-quality, engaging learning experiences and creative thinking

Table 2. Art teachers' perspectives on digitalization methods in education

Significance	Factor	Mean	Std. Deviation	teachers' satisfaction %	Cronbach's Alpha
Personalized Education	The extent of using this method	1.8	0.3	20%	
	The level of students' learning	1.9	0.5	40%	
Virtual Education	The extent of using this method	2.6	0.3	52%	0.78
	The level of students' learning	2.6	0.4	59%	
Blended Education	The extent of using this method	3.3	0.5	68%	
	The level of students' learning	3.5	0.4	70%	

Figure 2 presents the disadvantages of digitalizing art education from teachers' perspective. The data for this section were collected through questionnaires, and based on the analysis, most teachers identified five key drawbacks of integrating digital technologies into art education:

- Lack of teacher proficiency in digital technologies: It is undeniable that technology has a constructive relationship with visual arts, and this does not contradict the global artistic content created through educational technologies. However, many teachers expressed shock at the rapid changes in teaching methods and felt unprepared to implement these technologies in their practice effectively.

- Elimination of hands-on learning experiences and artistic creation: Participants emphasized that material practice, physical engagement, and tactile experience are central to visual arts education. One teacher stated: "Working with physical materials is not only the foundation of visual arts education but also essential for understanding art—students must create art to comprehend it truly." They argued that students should manipulate materials and engage in hands-on exploration to develop artistic intuition.

strategies are challenging to implement in online classes. One respondent noted: "Technology itself is not the goal; while it has great potential, it must be used appropriately and tailored to suit artistic content."

Over-reliance on digital technologies: Teachers reported various technical challenges when using digital tools in art education, including power outages, internet disruptions, hardware failures, and a lack of technical support. These obstacles can negatively impact teaching effectiveness and students' learning processes.

- Students' lack of proficiency in digital technologies: As one teacher put it: "Students play an active role in the educational process, and their learning is the ultimate goal of education." However, teachers noted that some students have limited experience with digital tools, which can disrupt their learning process. Furthermore, students' digital literacy skill variations affect their learning speed and quality. This lack of digital proficiency can reduce confidence, lower engagement, and, ultimately, decrease learning outcomes. (Figure 2)
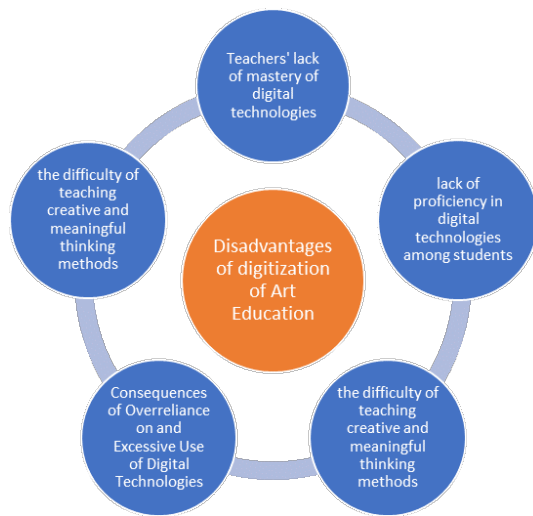
Advantages of Digitization of Art Education

Figure 2. Disadvantages of digitization of art education

Chart 1 visually represents the advantages of digitization in art education, as reported by teachers. The identified benefits are categorized and ranked based on their frequency and level of emphasis among participants.

83% of teachers cited the high speed of data transfer as the most prominent advantage, followed closely by the speed of saving and modifying information (81%). Additionally, accessibility without time and place limitations (75%) and accessibility to endless sources of information (74%) were highlighted as key benefits.

Other notable advantages include the attractiveness of digital classrooms (66%), the affordability of digital tools for students (59%), and improved information security (40%). However, some benefits, such as the adaptation of new technologies to various learning styles (31%) and flexibility in learning approaches and progress monitoring

(29%), received comparatively lower emphasis, indicating areas where digital education may still require further development.

This figure effectively illustrates how digital tools are perceived as enhancing efficiency, accessibility, and engagement in art education while also pointing out aspects that might need further refinement. (Chart 1)

Basic Provisions

The rapid digital transformation in various fields has significantly impacted art education, necessitating a delicate balance between traditional artistic techniques and
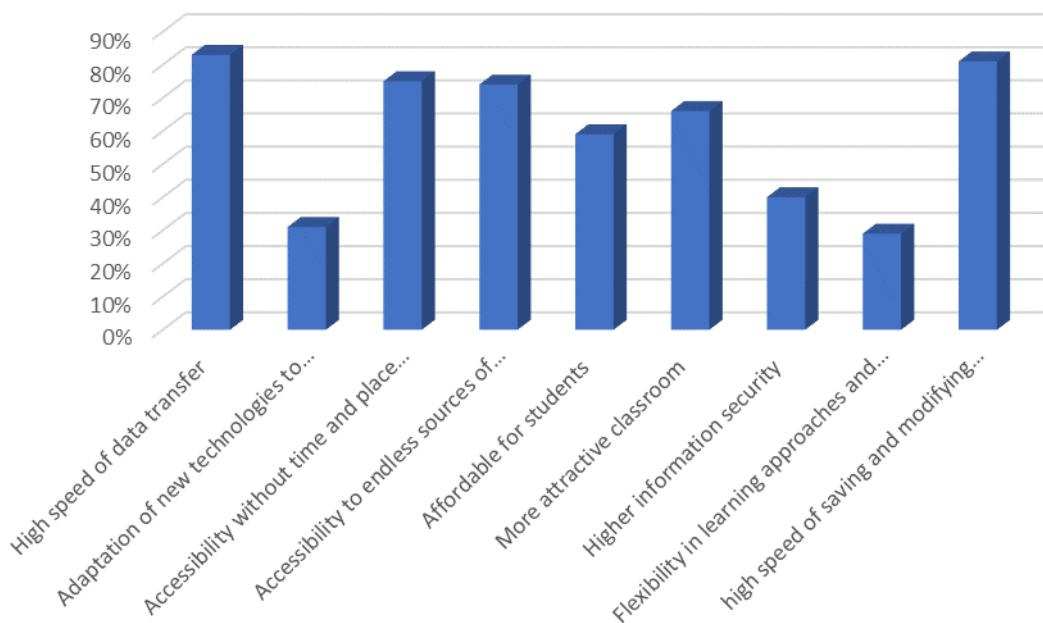

Chart 1. Advantages of digitization of art education

CENTRAL ASIAN ART: LANGUAGE AND TEXT IN A CONTEMPORARY PERSPECTIVE

emerging digital methodologies. This study explores the integration of digital tools within the Department of Art Education at Abai Kazakh National Pedagogical University in Kazakhstan, a country at the crossroads of Eastern and Western cultural influences. The need for this research arises from the challenges art educators face in preserving the essence of traditional artistic practices while embracing technological advancements that enhance creativity, accessibility, and pedagogy. Without a well-structured approach, the risk of diminishing hands-on artistic experience while adopting digital innovation remains a concern.

By examining the specific case of Kazakhstan's leading pedagogical institution, this study highlights the practical challenges and opportunities in integrating digital approaches into art education. The findings contribute to a broader academic discourse on how educational institutions can harmonize innovation with tradition while addressing the geographical and cultural dynamics that influence curriculum development. This research is particularly significant for art education policymakers, curriculum designers, and educators striving to implement digital tools without compromising artistic authenticity. The insights gained can serve as a model for other institutions worldwide that seek to navigate the digital shift in art education effectively.

Conclusion

Based on the results presented in the tables and charts, the advantages of employing technological approaches in art education outweighed the disadvantages, with high levels of teacher satisfaction regarding virtual and blended learning methods. However, despite these positive evaluations, the educational structure still exhibits gaps in skills and digital literacy

concerning the effective use of these technologies in the learning process.

This issue is particularly evident in Figure 2's findings, where teachers identified their lack of proficiency in digital technologies, students' unfamiliarity and limited experience with specific tools, and inadequate hardware and software support as key challenges. Furthermore, this study emphasizes that despite the distinctions between traditional and technology-based teaching methods, educators perceive blended learning approaches in art education as highly effective, highlighting the necessity of integrating both methods into the curriculum.

Conversely, teachers have yet to develop the necessary strategies and skills to assess personalized learning approaches in art education, indicating a need for further research in this area. The lack of awareness regarding the potential features of digital technologies, which was also noted as a disadvantage, may contribute to the weaknesses in implementing personalized learning methods. A teacher who fully understands the capabilities of digital tools can tailor them to meet individual students' needs and skill levels, designing curricula and assignments that align with students' motivation, abilities, and the available technological affordances.

Recommendations for Enhancing the Integration of Traditional and Digital Art Education

The ultimate goal of this study is to propose solutions for bridging the gap between traditional and digital education while facilitating a more effective integration process. To achieve a seamless interaction between digital technologies and art education, educational institutions, teachers, and students must each actively adapt to and harmonize this transition. Therefore, the following measures are suggested:

• Educational institutions should incorporate modern relevant technologies

while embracing digital art education trends.

• Institutions and educators must establish the necessary infrastructure to support the implementation of new digital technologies in art education.

• Teachers should be aware of the strengths and limitations of digital technologies and strive to align these tools with their curricula.

• Educators play a critical role in introducing students to these technologies and demonstrating their capabilities in creative practice.

• Teachers should lead and guide students through virtual, digital, and online learning environments.

• Students should be motivated to develop technical literacy and digital proficiency.

• Learners must focus on enhancing their creative thinking and artistic innovation, rather than solely relying on the vast availability of digital resources.

• Students should acquire diverse skills to utilize digital technologies in their artistic development effectively.

Integrating digital technologies into art education should primarily focus on fostering creativity and facilitating the artistic creation process. Any implemented strategies must be aligned with this overarching objective.

Contribution of authors:
M. Shiri – compilation of research literature and background, data collection and analysis using SPSS software, scientific editing and text proofreading, as well as final revision.

K. Baigutov – supervision of the research plan, development and revision of the questionnaire, and data collection.

Вклад авторов
М. Шири – сбор научной литературы и предшествующих исследований, сбор данных и их анализ с использованием программы SPSS, научное редактирование и корректура текста, а также финальная правка.

К. Байгутов – контроль за исследовательским проектом, разработка и пересмотр анкеты, сбор данных.

Авторлар үлесі
М. Шири – зерттеу әдебиеті мен алдыңғы зерттеулерді жинақтау, деректерді жинау және оларды SPSS бағдарламасы арқылы талдау, ғылыми редакциялау және мәтінді түзету, сондай-ақ соңғы түзету.

К. Байгутов – зерттеу жоспарын бақылау, сауалнаманы әзірлеу және қайта қарау, деректерді жинау.

References

Adobe "Future of Creativity" Study: 165M+ creators joined creator Economy since 2020. news. adobe.com/news/news-details/2022/adobe-future-of-creativity-study-165m-creators-joined-creator-economy-since-2020.

Alenezi, Mamdouh, et al. "The need to integrate digital education in higher education: challenges and opportunities." *Sustainability*, vol. 15, no. 6, Mar. 2023, p. 4782. https://doi.org/10.3390/su15064782.

Asare, Samuel, et al. "A Comparative Study of Traditional Art Techniques versus Digital Art Techniques in the Context of College Visual Art Education." *American Journal of Arts Social and Humanity Studies,* vol. 3, no. 1, Aug. 2023, pp. 21–34. https://doi.org/10.47672/ajashs.1556.

Barbour, Andrew. *An ethnography of students' extensive use of computers and digital technologies within further education classrooms*—University of Huddersfield, 2014, eprints. hud.ac.uk/id/eprint/24472/1/abarbourfinalthesis.pdf.

Charfeddine, Lanouar, and Mohamed Umlai. "ICT sector, digitization and environmental sustainability: A systematic review of the literature from 2000 to 2022." *Renewable and Sustainable Energy Reviews,* vol. 184, July 2023, p. 113482. https://doi.org/10.1016/j.rser.2023.113482.

Dooley, Caitlin McMunn, et al. "Digital Participatory Pedagogy: Digital participation as a method for technology integration in curriculum." *Journal of Digital Learning in Teacher Education,* vol. 32, no. 2, Mar. 2016, pp. 52–62. https://doi.org/10.1080/21532974.2016.1138912.

Farrell, Lesley, et al. "Literacy and the workplace revolution: a social view of literate work practices in Industry 4.0." *Discourse Studies in the Cultural Politics of Education,* vol. 42, no. 6, May 2020, pp. 898–912. https://doi.org/10.1080/01596306.2020.1753016.

Featherstone, Mark, and Jacob Habgood. "UniCraft: Exploring the impact of asynchronous multiplayer game elements in gamification." *International Journal of Human-Computer Studies,* vol. 127, May 2018, pp. 150–68. https://doi.org/10.1016/j.ijhcs.2018.05.006.

Flores-Vivar, Jesús-Miguel, and Francisco-José García-Peñalvo. "Reflections on the ethics, potential, and challenges of artificial intelligence in the framework of quality education (SDG4)." *Comunicar*, vol. 31, no. 74, Sept. 2022, pp. 37–47. https://doi.org/10.3916/c74-2023-03.

Grájeda, Alberto, Johnny Burgos, et al. "Assessing student-perceived impact of using artificial intelligence tools: Construction of a synthetic index of application in higher education." *Cogent Education,* vol. 11, no. 1, Dec. 2023, https://doi.org/10.1080/2331186x.2023.2287917.

Grájeda, Alberto, Pamela Córdova, et al. "Embracing artificial intelligence in the arts classroom: understanding student perceptions and emotional reactions to AI tools." *Cogent Education*, vol. 11, no. 1, July 2024, https://doi.org/10.1080/2331186x.2024.2378271.

Hughes, Joan E., and M. D. Roblyer. *Integrating Educational Technology into Teaching: Transforming Learning Across Disciplines*. 9th ed., Pearson, 2022.

infed.org. "What can education learn from the arts about the practice of education? - infed.org." *infed.org,* 22 June 2024, infed.org/what-can-education-learn-from-the-arts-about-the-practice-of-education.

Lin, Haozhuo, and Qiu Chen. "Artificial intelligence (AI) -integrated educational applications and college students' creativity and academic emotions: students and teachers' perceptions and attitudes." *BMC Psychology*, vol. 12, no. 1, Sept. 2024, https://doi.org/10.1186/s40359-024-01979-0.

Marrone, Rebecca, et al. "Creativity and Artificial Intelligence—A student perspective." *Journal of Intelligence,* vol. 10, no. 3, Sept. 2022, p. 65. https://doi.org/10.3390/jintelligence10030065.

McNulty, Niall. "Online Education Vs Traditional Education – Which One Is Better and Why." *Niall McNulty,* 7 Mar. 2025, www.niallmcnulty.com/2021/04/what-is-the-difference-between-online-education-and-traditional-education.

Qureshi, Muhammad Imran, et al. "Digital Technologies in Education 4.0. Does It Enhance the Effectiveness of Learning? A Systematic Literature Review." *International Journal of Interactive Mobile Technologies (iJIM),* vol. 15, no. 04, Feb. 2021, p. 31. https://doi.org/10.3991/ijim.v15i04.20291.

Sangapu, Indira. "Artificial Intelligence in Education - From a Teacher and a Student Perspective." *SSRN Electronic Journal*, Jan. 2018, https://doi.org/10.2139/ssrn.3372914.

Shiri, Masoumeh, and Karim Baigutov. "Gender Disparities in Digital Technology Engagement: A Study of Student Participation in Art Classes." *22nd LACCEI International Multi-Conference for Engineering, Education and Technology (LACCEI 2024)*, 15 Aug. 2024. Conference. https://doi.org/10.18687/laccei2024.1.1.1495

Shiri, Masoumeh, and Karim Baigutov. "Evaluating Art Students' Engagement With Digital Technologies in Classroom Settings." *International Journal of ADVANCED AND APPLIED SCIENCES*, vol. 11, no. 11, Nov. 2024, pp. 240–48. https://doi.org/10.21833/ijaas.2024.11.025.

Shiri, Masoumeh, and Karim Baigutov. "Exploring the influence of teachers' academic rank in advancing inclination to TPACK in art education." *Social Sciences & Humanities Open,* vol. 11, Dec. 2024, p. 101252. https://doi.org/10.1016/j.ssaho.2024.101252.

Shiri, Masoumeh, and Karim Baigutov. "Exploring the Influence of Teachers' Academic Rank in Advancing Inclination to TPACK in Art Education." *Social Sciences & Humanities Open*, vol. 11, Dec. 2024, p. 101252. https://doi.org/10.1016/j.ssaho.2024.101252.

Stambekova, Zhazira, et al. "Development of innovative activities of future design specialists based on Student-Centred Learning." *Pakistan Journal of Life and Social Sciences (PJLSS)*, vol. 21, no. 2, Jan. 2023, https://doi.org/10.57239/pjlss-2023-21.2.003.

Tvrdišić, Sara. "The Impacts of Digitalization on Traditional Forms of Art." *AM Journal of Art and Media Studies,* no. 27, Apr. 2022, pp. 87–101. https://doi.org/10.25038/am.v0i28.502.

Wilks, Judith, et al. "Digital Technology in the Visual Arts Classroom: An [Un]Easy Partnership." *Studies in Art Education*, vol. 54, no. 1, Oct. 2012, pp. 54–65. https://doi.org/10.1080/00393541.2012.11518879.

Zhazira, Stambekova, et al. "A Comprehensive Study on Fostering Innovative Activities in Future Specialists through Training and Student-Centered Learning Approaches." *Pakistan Journal of Life and Social Sciences (PJLSS),* vol. 22, no. 1, Jan. 2024, https://doi.org/10.57239/pjlss-2024-22.1.005.

Деменкова, Т. А., et al. "Мобильные Приложения Для Задач Дистанционного Обучения." *Russian Technological Journal,* vol. 6, no. 1, Jan. 2018, pp. 5–19. https://doi.org/10.32362/2500-316x-2018-6-1-5-19.

Шири Масумех, Байгутов Карим

Абай атындағы Қазақ ұлттық педагогикалық университеті (Алматы, Қазақстан)

КӨРКЕМ БІЛІМДЕГІ ЦИФРЛЫҚ ӨЗГЕРІС: ДӘСТҮР, ИННОВАЦИЯ ЖӘНЕ ИНТЕГРАЦИЯ АРАСЫНДАҒЫ ТЕҢГЕРІМ.
Кейс-Зерттеу: Көркем білім кафедрасы, Абай атындағы Қазақ ұлттық педагогикалық университеті, Қазақстан

Аннотация. Білім беруді цифрландыру – қазіргі оқыту мен білім беру үдерісінің маңызды аспектісіне айналып, оқыту әдістері мен студенттердің белсенділігіне айтарлықтай әсер етуде. Бұл мақалада университеттегі көркем білім беруді цифрландыру әдістері қарастырылып, осы саладағы мұғалімдердің көзқарастарын анықтау мақсатында зерттеу жүргізілді. Зерттеу сипаттамалық-талдамалық әдісті қолданады және Лайкерт шкаласы мен ашық сұрақтарды қамтитын 23 тармақтан тұратын сауалнама арқылы сандық және сапалық деректер жинауды көздейді. Деректерді талдау нәтижелері мұғалімдердің аралас оқыту әдістеріне оң және қанағаттанарлық көзқараста екенін көрсетеді. Жеке технологиялық тәсілдерді қолдануда бірқатар кемшіліктер байқалғанымен, олар дәстүрлі және цифрлық оқыту әдістері мен онлайн оқытуды үйлестіру арқылы студенттердің оқу нәтижелерін лайықты әрі тиімді деп бағалайды.

Сауалнама нәтижелерін кодтау арқылы цифрлық технологияларды қолданудың артықшылықтары мен кемшіліктерін бейнелейтін екі диаграмма әзірленді. Педагогтар, студенттер және білім беру мекемелерінің білім беруді цифрландыруға қатысты көзқарастары әртүрлі екенін ескере отырып, дәстүрлі және цифрлық оқыту әдістерінің интеграциясын зерттеу – стратегиялық мәнге ие және бұл үш топтың пікірлерін ескеру қажеттігін айқындайды. Мақаланың басты мақсаты – дәстүрлі көркем білім мен техникалық-көркем білім арасындағы алшақтықты жою. Алынған нәтижелер технологияны көркемдік білім беру саласына енгізудің артықшылықтары кемшіліктерінен басым екенін көрсетсе де, оның жүзеге асырылуын одан әрі зерттеу маңызды болып қала береді.

Түйін сөздер: білім беруді цифрландыру, көркем білім, дәстүрлі оқыту, интеграция, цифрлық технологиялар.

Масумех Шири, Байгутов Карим

Казахский национальный педагогический университет имени Абая (Алматы, Қазахстан)

ЦИФРОВОЙ СДВИГ В ХУДОЖЕСТВЕННОМ ОБРАЗОВАНИИ: БАЛАНС ТРАДИЦИЙ, ИННОВАЦИЙ И ИНТЕГРАЦИИ.
Кейс-стади: Кафедра художественного образования, Казахский национальный педагогический университет имени Абая, Казахстан

Аннотация. Цифровизация образования стала важным аспектом современного преподавания и обучения, существенно влияющим на методы обучения и вовлеченность студентов. В этой статье рассматриваются методы цифровизации художественного образования в университете, где проводится исследование, чтобы прояснить перспективы учителей в этой области. Исследование использует описательно-аналитический исследовательский подход и использует анкету с 23 пунктами, включая шкалу Лайкерта и открытые вопросы, для сбора количественных и качественных данных. Результаты анализа данных показывают, что учителя положительно и удовлетворительно относятся к смешанным методам обучения. Хотя они демонстрируют значительные недостатки в использовании персонализированных технологических подходов к обучению, они оценивают результаты обучения студентов как надлежащие и эффективные при сочетании традиционных и цифровых методов обучения и онлайн-обучения. Путем кодирования результатов анкетирования были разработаны две диаграммы для иллюстрации преимуществ и недостатков использования цифровых технологий. Учитывая, что педагоги, студенты и образовательные учреждения имеют различные взгляды на цифровизацию образования, изучение интеграции традиционных и цифровых методов обучения является стратегическим и подчеркивает необходимость учета точек зрения этих трех групп. Основной задачей этой статьи является преодоление разрыва между традиционным художественным образованием и техническим художественным образованием. Хотя полученные результаты свидетельствуют о том, что преимущества интеграции технологии в художественное образование перевешивают ее недостатки, дальнейшее изучение ее осуществления по-прежнему имеет важное значение.

Ключевые слова: цифровизация образования, художественное образование, традиционное обучение, интеграция, цифровые технологии.

Авторлар туралы мәлімет:	**Сведения об авторах:**	**Information about the authors:**

Масумех Шири – 3-курс докторанты, Көркем білім кафедрасы, Абай атындағы Қазақ ұлттық педагогикалық университеті (Алматы, Қазақстан)

Масумех Шири – Докторант 3-го года обучения, кафедра художественного образования, Казахский национальный педагогический университет имени Абая (Алматы, Қазахстан)

Masoumeh Shiri – The 3rd year doctoral student, Art Education Department, Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)

ORCID ID: 0009-0004-0246-7517
E-mail: m.shiri@abaiuniversity.edu.kz

Карим Байгутов – Өнер факультетінің деканы, Абай атындағы Қазақ ұлттық педагогикалық университеті (Алматы, Қазақстан)

Карим Байгутов – Декан факультета искусств, Казахский национальный педагогический университет имени Абая (Алматы, Қазахстан)

Karim Baigutov – Dean of the Faculty of Arts, Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)

ORCID ID: 0000-0002-1013-5123
Email: b.karim@abaiuniversity.edu.kz