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ACADEMICIANS' VIEWS ON THE USE OF ARTIFICIAL INTELLIGENCE IN FINE ARTS

GÜZEL SANATLAR ALANINDA YAPAY ZEKÂ UYGULAMALARI ÜZERİNE AKADEMİSYEN GÖRÜŞLERİ

Öznur IŞIR¹ • Çiğdem TANYEL BAŞAR² •



ORCID: Ö.I. 0000-0002-7231-0329 Ç.T. B. 0000-0001-5740-336X

Corresponding author/Sorumlu yazar: ¹ Öznur Işır Balıkesir University, Türkiye E-mail/E-posta: oisir@live.com

² Çiğdem Tanyel Başar Izmir Democracy University, Türkiye **E-mail/E-posta:** cigdemtanyel@gmail.com

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Abstract

Generative artificial intelligence (AI) tools transform creative processes, especially their capacity to produce content quickly; they raise concerns about education, authenticity, and ethics. This study aimed to examine the views of academics working in Fine Arts Faculties in Turkey on the effects of AI technologies on art education and to reveal their approaches to these technologies. For this purpose, the data obtained from 55 academicians through semi-structured interviews were subjected to thematic analysis. The findings showed that AI applications are adopted more in fields such as Graphic Design and Animation, while these technologies are handled more distantly in departments such as Painting. Academics were found to have concerns about the ethical dimensions of AI use, especially plagiarism and intellectual property rights. Opinions emphasize that while AI has the potential to increase creativity and productivity, it requires careful integration to preserve traditional skills and the authenticity of art. Consequently, the future of AI technologies in education should be addressed with an updated curriculum on these technologies' ethical and educational issues.

Keywords: Artificial Intelligence, Creativity, Fine Arts Education, Productive Artificial Intelligence.

Öz

Üretken yapay zeka (YZ) araçları, özellikle hızlı içerik üretme kapasiteleri ile yaratıcı süreçleri dönüştürmekte; eğitim, özgünlük ve etik konularında endişelere yol açmaktadır. Bu çalışma, Türkiye'deki Güzel Sanatlar Fakültelerinde görev yapan akademisyenlerin YZ teknolojilerinin sanat eğitimine etkilerine ilişkin görüşlerini incelemeyi ve bu teknolojilere yaklaşımlarını ortaya koymayı amaçlamıştır. Bu amaçla 55 akademisyenden yarı yapılandırılmış görüşmeler yoluyla elde edilen veriler tematik analize tabi tutulmuştur. Bulgular, Grafik Tasarım ve Animasyon gibi alanlarda YZ uygulamalarının daha fazla benimsendiğini, Resim gibi bölümlerde ise bu teknolojilerin daha mesafeli ele alındığını göstermiştir. Akademisyenlerin, YZ kullanımının etik boyutları, özellikle intihal ve fikri mülkiyet hakları konusunda endişeleri olduğu görülmüştür. Görüşler, YZ'nin yaratıcılığı ve üretkenliği artırma potansiyeline sahip olmakla birlikte, geleneksel becerileri ve sanatın özgünlüğünü korumak için dikkatli bir entegrasyon gerektirdiğini vurgulamaktadır. Sonuç olarak, YZ teknolojilerinin eğitimdeki geleceği, bu teknolojilerin etik ve eğitim sorunları hakkında güncellenmiş bir müfredatla ele alınmalıdır.

Anahtar Sözcükler: Yapay Zeka, Yaratıcılık, Güzel Sanatlar Eğitimi, Üretken Yapay Zeka.



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INTRODUCTION

The rise of technologies belonging to the branch of science that examines how we can make artificial systems (with bodies, if necessary) perform every cognitive activity that natural systems can do (whether intelligent or not) at even higher levels of achievement (Say, 2018, p. 83) is causing both revolutionary opportunities and significant debates in the world of art and design. In particular, generative AI applications such as DALL-E, Midjourney, and Stability Diffusion are reshaping creative processes with their capacity for rapid content creation. Özkan (2024, p. 95) defines these technologies as "adding a new dimension to human creativity by producing outputs such as text, code, graphics or sound". A new class of tools, colloquially called generative AI, can produce high-quality artistic media for visual arts, concept art, music, fiction, literature, video, and animation. The generative capabilities of these tools are likely to fundamentally alter the creative processes by which creators formulate ideas and put them into production (Epstein et al., 2023). AI is already being used as a powerful tool and even as a partner for some artists (Chatterjee, 2022).

There is research showing that these technologies can be a supportive and inclusive tool for artistic production; AI tools can be used in creative processes and analysis of fine art, such as painting, music, and literature. They also have potential in enhancing artistic events, installations, and performances (Oksanen et al., 2023). AI-supported analysis techniques also offer revolutionary tools for art historians and curators. With deep learning algorithms, stylistic and formal analyses of artworks can be performed more quickly and systematically (Spee et al., 2024; Stork, 2024).

However, these developments also raise technical, ethical and legal issues. In particular, there are uncertainties regarding copyright, originality and artistic status of content produced by artificial intelligence (Şen Atiker, 2024). The idea that art is based on human experience and original creativity is at the center of the debates about whether generative artificial intelligence tools deserve the title of "creative". Another important debate is how current developments will transform higher education. Formal art and design education aims to teach students the necessary technical skills, make them experience the steps of the creative process, and explore forms of artistic expression through a pre-structured curriculum. At the end of the process, students should be able to develop innovative solutions to a problem and have the technical skills to implement these solutions effectively. However, the speed, prevalence, and accessibility of productive AI technologies have reached a dimension that questions the foundations of these processes. While there are opinions that using these technologies in education will support students' creativity, there are also concerns that it may weaken artistic skills.

There is currently an increasing need to understand AI's role in the field of fine arts (Oksanen et al., 2023). In the context of Turkey, examining the views of academics working in Fine Arts Faculties towards AI, understanding the attitudes of art and design educators towards AI technologies and their integration of these tools into education is very important in terms of both planning the future of education and creating a basis for curriculum updates. This research aims to provide an essential roadmap for the future of art and design education by examining the effects of AI technologies on art education, their ethical dimensions, and their relationship with originality through the views of academics. Within the scope of the research, answers to the following sub-questions will be sought in line with this general purpose:

1. Do the lecturers working in the Faculties of Fine Arts utilize artificial intelligence software in art teaching?

- 2. Do the lecturers working in Fine Arts Faculties;
 - a) What are their positive opinions about artificial intelligence software?
 - b) What are their negative opinions about artificial intelligence software?

3. Do lecturers' opinions on using artificial intelligence vary depending on the branches of art they specialize in?

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4. What are the instructors' opinions about the ethical dimension of using artificial intelligence software in the field of art?

5. What are the instructors' opinions about the possible effects of artificial intelligence software on art education in the future?

METHODOLOGY

Qualitative data collection techniques and analysis methods were employed in this study. Data were gathered through a comprehensive review of the relevant literature, and semi-structured interview questions were distributed via Google Forms. The interview questions targeted faculty members who currently teach in Fine Arts and Art and Design faculties across Turkey. A total of 57 responses were collected. After reviewing the submissions, one response was excluded for being incomplete, and another was excluded because it was determined that the participant had used an artificial intelligence tool to generate their answers. These exclusions were made to ensure the highest data quality for our analysis. Research assistants who do not teach were excluded from the study, as they fall outside the scope of the research objectives.

The collected data were examined using thematic analysis, supported by the qualitative data analysis software ATLAS.ti for coding and organization. Furthermore, the ChatGPT4.0 artificial intelligence application was used to identify and refine thematic categories. ATLAS.ti was employed for systematic coding and categorization of the data, while ChatGPT4.0 served as a supplementary tool to aid in thematic refinement and interpretation. Integrating these tools improved the efficiency and comprehensiveness of the analytical process. Before the research commenced, approval was obtained from the ethics committee at the researcher's institution under decision number 2023/10-02, dated 03/08/2023, and protocol number 2023/74. In addition, participants were thoroughly informed about the study's purpose, procedures, potential benefits, and risks. Written informed consent forms outlining these details were provided to all participants. Only those who voluntarily signed and returned the consent forms were included in the study, ensuring their willingness and complete understanding of their involvement.

FINDINGS

Participant Profile

To obtain their opinions through a Google form, lecturers and faculty members working in all Fine Arts Faculties, Art and Design Faculties, and Art Design and Architecture Faculties in Turkey were asked questions for the research. Fifty-seven participants responded to the researchers' request for interview participation; two were excluded from the study. In the research, it was realized that one participant asked and answered the interview questions to ChatGPT, an artificial intelligence application, and the other participant did not answer any questions other than the department information. Accordingly, the research findings were structured according to the analysis of the data obtained from 55 participants. One of the participants wrote the name of the faculty instead of the department name, and the participant profile of the other participants based on the department is reflected in Table 1:

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Participant Profiles by Department	
Department	Number of Participants
Painting	10
Graphic Design	8
Cartoon and Animation	6
Graphic	4
Graphic Arts	4
Visual Arts	3
Visual Communication Design	3
Visual Arts and Visual Communication Design	2
Communication and Design	2
Communication Design	2
Digital Game Design	2
Communication Arts	1
New Media and Communication	1
Fine Arts and Graphic Design	1
Radio and Television Programming	1
Computer Aided Art and Animation	1
Print Arts	1
Fine Arts	1
Ceramic-Glass	1

 Table 1. Participant profile by department

Usage of Artificial Intelligence Applications in Individuals and Classes

When asked, "Have you used artificial intelligence applications such as DALL-E-2, Midjourney, and Stability Diffusion before? If yes, which ones?" 35 participants had used these applications, while 20 had not.

In the answers given to the question about the use of AI applications, when examining the relationship between the department where the participants work and their usage of the program, it is evident that the rate of use of AI applications is high among participants, mainly in Graphic Design, Communication Design, Visual Communication Design, and Cartoon and Animation departments. However, it is understood that the number of participants benefiting from AI applications among those working in the Department of Painting could be much higher. In this sense, participants in departments related to computer technology are more inclined towards AI applications. When analyzing the answers given to the question regarding the use of AI applications, the AI applications experienced by the users are shown in Table 2 below:

Experienced AI Applications	
Application	Number of Users
Midjourney	32
Dall-e 2	19
Stable Diffusion	8
ChatGPT	3
Leonardo AI	2
ReRoom AI	1
Recraft	1
Adobe Firefly	1
Disco Diffusion	1

Table 2. Experienced Artificial Intelligence applications

When the answers to "Do you benefit from artificial intelligence applications in your courses?" are analyzed, 20 participants benefit from AI applications, while 35 do not. According to this table, although the participants benefit from AI applications in their studies and research, they cannot adapt them to their courses.

Findings on the Use of Artificial Intelligence Applications in Students' Projects and Homework When the responses to the question "What do you think about students' utilization of artificial intelligence applications in their projects or assignments?" are analyzed, it is noted that 33 participants expressed positive opinions, 14 participants expressed negative opinions, and 7 participants expressed both positive and negative views. The themes and sub-themes derived from the views can be examined in Table 3 below:

Themes Regarding the Use of AI Applications in Student Projects/Assignments
The Impact of Artificial Intelligence on Creativity
A tool to support creativity
Risk of weakening creativity
Educational Outcomes and Personal Development of the Student
AI's contribution to personal expression
The potential for AI to harm the learner
Ethics and Authenticity
AI supports the original contribution
Plagiarism and copying concerns
The Inevitability of Technology
Support for the use of AI
The guiding role of teachers
Differentiated Opinions According to Field of Application
Restricted use in Visual Arts
Promoting the use of AI in Graphic Design

Table 3. Themes related to using Artificial Intelligence applications in student projects/ assignments

The participants' views on using AI in student projects reflect both negative and positive aspects. Regarding creativity, one group views AI as a tool that enhances students' creativity (K2, p.2; K15, p.2), while another group argues that AI weakens students' creativity (K30, p.2). These views indicate the complex impact of AI on art students. Participants like K4 (p.2) also noted that AI negatively affects students' motor skills. Participants highlighted the potential harm AI could cause to educational outcomes and personal development. For instance, students completing AI assignments may not adhere to course content (K48, p.2; K49, p.2), which is believed to affect their ability to express themselves personally negatively.

Under the theme of ethics and originality, participants noted that while AI could contribute to original work, it may also raise issues of plagiarism and copying. K44 (p.2) suggested that AI can be helpful in research assignments, but students need to synthesize the information with new ideas. However, K13 (p.2) argued that excessive use of AI leads to losing originality. Similarly, K54 (p.2) emphasized that claims of students producing AI-generated work as their own could raise ethical concerns.

Some participants expressed that using AI is inevitable and that students must learn this technology. K10 (p.2) stated that banning AI would be outdated, while K29 (p.2) mentioned that denying AI usage is impossible. The role of educators in this process is also significant. K10 (p.2) argued that educators should teach AI and guide students in using it creatively.

Interdisciplinary differences in academia are notably significant. In the domains of Fine Arts and Art Design, there are prevalent concerns regarding the integration of artificial intelligence (AI). K13 (p.2) asserts that AI is completely prohibited within illustration courses; however, its utilization is favored in creative writing courses and actively encouraged in fields such as Graphic Design. K16 (p.2) emphasizes the critical role of visual communication in Graphic Design, positing that the application of AI is entirely



well-suited for this objective. Additionally, K16 points out that if students can proficiently articulate their design strategies to AI, it may facilitate the generation of complex visuals and the automation of repetitive tasks.

Views on the Ethical Dimension of Artificial Intelligence Applications

Perspectives on the ethical implications of artificial intelligence (AI) are diverse. A total of 17 participants do not identify any ethical concerns associated with the implementation of AI applications, whereas 38 participants express apprehension regarding issues related to source citations and the rights of intellectual property. The ethical challenges inherent in AI are contingent upon its application context. Upon analyzing the participants' viewpoints concerning the ethical status of AI, the themes and sub-themes presented in Table 4 were discerned.

Themes for the Ethical Dimension of AI Use
Lack of Attribution and Transparency
Lack of citation
Lack of transparency
Artist Rights and Copyright Violations
Lack of artist consent
Lack of royalty payments
Decreased Creativity and Labor Value
Loss of manual labor and skills
Usurpation of creativity
Ethical Consideration Based on Intended Use and Context
Ethical status according to context
User contribution
Plagiarism and Legal Processes
Plagiarism detection problem
Need for legal development

Table 4. Themes related to the ethical dimension of the use of Artificial Intelligence

The ethical implications of AI's lack of attribution and transparency are among the first outstanding issues. Despite using internet sources, P4's observation that AI fails to cite them or acknowledge artists' works underscores this problem (p.2). This lack of transparency extends to not revealing the sources used and not compensating the authors. Similarly, P51's point about AI platforms' potential to address copyright issues through collaboration with licensed image-sharing platforms is a significant ethical consideration (p.2).

AI's violation of artists' rights and copyright laws is another significant ethical issue. P24's view that AI's use of archives created without artists' permission is unethical (p.2) is a clear example. Similarly, P50's stance that AI's production of works in an artist's style is unethical and should be subject to legal sanctions is a strong argument. This perspective underscores the need to protect artists' creative rights (p.2).

Another ethical concern regarding the use of AI in art is the potential devaluation of creativity and labor. P26 argues that AI devalues manual labor and talent, noting that AI can replicate a painting quickly and accurately, which may diminish the value of original works (p.2). P49 highlights that students using AI to replicate artists' styles may weaken their creativity and hinder artistic development (p.2). These critiques suggest that AI is seen as a tool that diminishes creativity and individual contributions. Additionally, the ethical status of AI depends on its purpose and context. P23 points out that AI's ethical acceptability "may vary according to the purpose it serves" (p.2). At the same time, P30 asserts that "ethical evaluations should be made according to the benefit-harm balance" (p.2), indicating that an AI's ethical implications differ based on its intended use.

AI practices raise significant ethical concerns, particularly regarding plagiarism and legal issues. P18 states, "The difficulty in detecting plagiarism in the content produced by AI leads to deficiencies in legal processes, and this situation should be improved" (p.2). P20 adds that AI introduces various ethical problems, with plagiarism and imitation being key concerns in academic and artistic fields (p.3). While



AI supports creative processes, these ethical challenges, including issues such as user consent, copyrights, and the value of creativity, must be addressed from multiple perspectives.

Opinions on the Positive Aspects of Artificial Intelligence Applications

When the answers given to the question "What do you think are the positive aspects of artificial intelligence applications?" were evaluated, the following themes and sub-themes were found in Table 5:

Participants' Positive Views Toward AI Applications
Ease of Use
Positive experience
Innovation
Creativity
Productivity
Productivity
Technological Progress
Gaining speed
Improving workflow
Concept design

 Table 5. Participants' positive views on Artificial Intelligence applications

When the themes and sub-themes that emerged as a result of the participants' opinions are examined, it is seen that the idea that AI applications provide ease of use gains weight. P2 expressed his thoughts about the subject with statements such as "I can say that it is positive in terms of providing ease of use in daily life and while doing research" (p.2). P15, on the other hand, suggested that AI applications should be used, especially while conducting research, and stated that they are straightforward to use and helpful in researching source books and articles (p.2). Similar to the previous participant, P7 also indicated that it provides convenience in research (p.2). At the same time, she also noted that "...it has the potential to provide a good base and inspiring beginnings on a path that can lead to qualified and comprehensive studies".

Innovation was defined as the development of new and creative ideas according to the standard view of many participants. It was addressed with the creativity, productivity, innovation, and efficiency subthemes. While P9 stated that AI applications positively affect creativity, especially in applied fields (p.3), P10 noted that AI is a valuable tool when getting professional help is impossible (p.2). P16 emphasized that AI enables them to produce many sketches quickly and increases the number of coincidences contributing to creativity (p.2). P29 stated that AI has positive effects in making technical knowledge accessible and realizing all kinds of designs (p.2).

When the productivity sub-theme under the innovation theme is analyzed, the participants stated that AI applications provide an effect that increases productivity in the design process. P6 emphasizes the importance of creative thinking and that AI speeds up the working time, allowing the idea to come to the forefront rather than labor (p.2). P33 states that AI applications make it possible to obtain more creative and diverse visual results with a vast vocabulary (p.2). P39 emphasizes that the features of AI, such as fast production, use of multiple variables, and offering different perspectives, are directly related to the concept of productivity (p.2). These statements show that AI applications contribute to productivity, functionality, and creative problem-solving processes.

Another sub-theme that draws attention to the theme of innovation is efficiency. P6 emphasized that AI applications shorten the labor process, allowing the thinking part of the projects to come to the forefront and that an efficient process is experienced (p.2). P33, on the other hand, points to the potential of the instructions given to the AI application platforms to produce more prosperous and more diverse visual outputs with a vast vocabulary and states that an efficient description process with accurate and comprehensive instructions will lead to creative results (p.2). In this context, the potential of a vast vocabulary to create diversity in the visual outputs of AI is an important capability that supports the theme of productivity.



When the participants' opinions regarding the positive aspects of AI applications were examined, technological progress was one of the main themes that attracted attention. From the views in this theme, the sub-themes of gaining speed, improving workflow, and concept design were reached. P23 emphasized that it is an advantage that AI applications save time and speed by solving many problems in daily life (p.2). P32 drew attention to the fact that the applications provide speed in the study process with the statement, "Providing a quick and general framework in terms of collecting information in a short time" (p.2). P51 stated that AI significantly shortens the time spent on tasks such as image search, creation, and presentation, allowing designers to produce their envisioned images faster without post-production. This saves time and costs and provides more time for creativity (P51, p.3).

In the statements above, the participant emphasized the liberation from mundane tasks AI provides, which makes designers feel more liberated and inspired. AI enhances efficiency, reduces costs, saves time for creativity, and integrates technology into creative processes. With its advantages, such as speed, cost savings, and workflow simplification, AI allows designers to create the visuals they want quickly and cheaply. This will enable them to focus more on their creativity instead of dealing with technical details.

Opinions on the Negative Aspects of Artificial Intelligence Applications

The themes and sub-themes that emerged when the negative responses of the participants towards AI applications were analyzed are shown in Table 6 as follows:

Participants' Negative Views on AI Applications	
Weakening of Originality and Creativity	
Loss of creative style	
Passive production and facilitation	
Lack of originality	
Knowledge and Cultural Biases	
Limited and inaccurate information	
Cultural bias	
Ethical and Legal Issues	
Copyright violations	
Cheating and plagiarism	
Education and Skills Decline	
Decline of traditional learning habits	
Declining technical skills	
Impacts on the Business Sector and Employment	
Restriction of creative industries	
Decline in art and design	

Table 6. Participants' negative views towards Artificial Intelligence applications

The first theme identified through the opinions is the weakening of originality and creativity in the works. This theme is divided into three sub-themes: loss of creative style, passive production and simplicity, and lack of originality. P14 pointed out the risk of AI diminishing individual style in creative processes, stating, "Although I think it eliminates the phenomenon of creative style, it will be useful if the person teaches his/her style" (p.2). This emphasizes the importance of preserving personal creative style. P19 highlighted the regression in creative thinking and the tendency to rely on simplicity with the statement, "At the point where users do not add their creativity, a passive form of production emerges..." (p.2). Similarly, P11 expressed concern that AI applications destroy originality and research in art, indicating a lack of original content and innovation in the production process (p.2).

The second theme in the negative opinions was evaluated under knowledge and cultural biases, divided into two sub-themes: limited and inaccurate information and cultural bias. P5 pointed out the limitation of AI databases, saying, "Having a limited database. Not being able to access up-to-date data can be seen as a deficiency. However, two important points are that the database expands with the inputs and the accuracy of the inputs is not confirmed, so database reliability is a big risk..." (p.3). This highlights the issue of limited access to accurate information. P9, sharing a similar concern, noted that inaccurate AI-generated information could negatively affect theoretical studies by leading to flawed frameworks



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and conclusions (p.2).

Additionally, P10 raised the issue of cultural bias, stating, "Since the source database of artificial intelligence platforms is mainly produced by Americans, their 'intelligence' is very Western, Americanlike. We who live outside Western geographies must create our databases and encourage AI to think like us" (p.3), emphasizing the need for more diverse and inclusive data sources. P18, who had a similar opinion, said AI can convey cultural prejudices and misinformation (p.2). These views emphasize that lack of local and cultural awareness can be a significant problem in AI algorithms. As a solution, participants argue that the need for culturally specific databases is undeniable, and these systems should be developed and trained from a local perspective.

The third theme, addressing ethical and legal issues, was divided into two sub-themes: copyright violations and copying/plagiarism. P7 (p.2) and K24 (p.2) highlighted that artists' works are used in AI education and libraries without permission, violating their rights. K34 (p.2) emphasized the urgency of legal regulations to protect authors. On plagiarism, P5 (p.3) noted that AI facilitates plagiarism and credibility risks, while P23 (p.2) pointed out that students' use of AI for homework leads to plagiarism. Similarly, P39 (p.3) expressed concerns about ethical issues arising from AI despite its conveniences.

Under the central theme of decline in education and skills, two sub-themes emerged: a decline in traditional learning habits and a reduction in technical skills. P24 noted that AI could prevent students from mastering core artistic skills, such as color knowledge and composition (p.3). P30 highlighted that AI reduces imagination and technical expertise in art and research (p.2). Additionally, P20 pointed out that AI encourages students to skip essential research and resource-gathering processes, exacerbating digital literacy gaps, as their relationship with digital tools tends to be more consumer-focused than professional (p.3).

In the negative opinions, some participants expressed concerns that AI applications might encourage laziness among art students. P32 argued that AI could lead people to laziness and hinder in-depth research (p.2). Similarly, P26 noted, "It encourages laziness, makes talent less important, and risks devaluation, which I think will negatively affect artists and students as well as the market" (p.2), highlighting the potential negative impact on the art market. Some participants also focused on the adverse effects of AI on the job market and employment. P6 pointed out that AI has the potential to limit job opportunities in creative industries (p.2), while P13 highlighted that AI might reduce labor and creativity, leading to a loss of artistic value (p.2). These views suggest a risk of negative impacts on artistic production processes.

Opinions on the Effects of Artificial Intelligence Applications on Art/Design Education

When the participants were asked about the effects of AI applications on art/design education, their opinions on the concept of "transformation" were collected and highly valued. The themes and subthemes obtained from the participant views on this subject are presented in Table 7 below:

Table 7. Intriguing themes regarding the effects of Artificial Intelligence applications on art/design education

Themes Regarding the Effects of AI Applications on Art/Design Education
The Transformative Impact of AI in Art and Design
Creativity and Transformation in the Design Process
Changes in Art and Design Education
The Necessity of Limited Use of AI
Emphasis on Dexterity and Human Creativity
Limitations in Applied Fields
Making AI Mandatory in Education
An Inevitable Technological Transformation
Need to Update Training Methods
Potential Impacts of AI in Art and Design
The Impact of AI on Aesthetics
Conceptual Transformation of AI in Art and Design

Participants who believe that AI can transform creative processes think AI has a significant impact, especially in visual arts and design. P4 emphasized that AI can increase design quality by saying, "Since artificial intelligence tools can apply the more mathematical rules of design very well, I think there will be an increase in the quality of the visuals produced in general" (p. 3). P19 stated that AI can complement human creativity by saying, "I think it will pave the way for humans and technology to produce together" (p. 3). Some participants who think AI should transform art and design education argue that this technology should find more of a place in education. P34 emphasized the place of AI in art and design education by saying, "Art and design education will need to cover how AI tools are used as well as basic principles" (p. 3).

The participants argue that AI cannot completely transform art and that human creativity should remain at the center of art. P22 stated that AI should have a limited place in art with the words, "Since art has developed in parallel with human dexterity and techniques since the beginning, everything outside this activity should be considered outside the concept of art" (p. 3). Similarly, P42 reiterated, "The essence of art is human creativity. Pure arts, painting, sculpture, music always exist," and stated that AI cannot complete art (p. 3). The participants who argued that the impact of AI should be limited in some applied fields emphasized that students should learn by making an effort. P9 defended the limited use of AI in applied fields: "It may have some positive effects in the film and animation production process, but I think that it should not be used as intensively in education as it is in the market" (p. 3).

Some participants stated that AI is inevitable in education and professional life and argued that keeping up with this transformation is necessary. P17 noted that "You cannot stay away from technology" and that the use of AI in education and design processes will become mandatory (p. 3). P39 stated that AI would be widely used in education by saying, "Artificial intelligence will also create, and all designers will have to adapt to it" (p. 3). The changes AI will create in education require updating educational methods. P20 argued that AI would create a permanent transformation in education by saying, "Our educational approach, evaluation criteria, even our curriculum will have to be updated with the acceptance of this reality and the existence of these tools" (p. 3).

Some participants think that AI's practical conveniences to the art production process can open more space for intellectual development. For instance, P21 stated that AI could be a tool for artists by automating repetitive tasks like color correction or background removal, thereby leaving more space for intellectual development (p. 3). Among the opinions, it is also emphasized that AI can change the conceptual structure of art, and this change will question the fundamental values of art in some areas. P29 said, "Photography is now completely disconnected from reality, which has now turned into a cotton thread. Photography will turn into something completely conceptual", drawing attention to the fact that AI will change the conceptual aspect of art (p. 3).

Predictions on the Future Impact of Artificial Intelligence Applications on Art Education

When the participants' opinions about their predictions on the future impact of AI applications on Art Education were analyzed, it was understood that the themes they focused on were ethical issues, professional changes, the effect of technology on art, and transformation in creative processes of utmost importance. These themes are at the forefront of our research and understanding. Accordingly, the emerging themes and sub-themes (Table 8) are as follows:

Themes for the Future of AI Applications in Art Education
Professional Changes in Art Education
The future of teaching and art education
New professional directions
AI's Ethical and Social Responsibility in Art Education
Ethical concerns and the risk of manipulation
Commercialization and digitalization of art
Application Areas of AI in Art Education
Digital art applications
Changing art fields with AI
Potential Threats of AI in Art and Design
Decline of art and creativity
Risk of causing laziness
Redefining Creativity in Art Education
Renegotiating the definition of art
AI offers new forms of creativity

Table 8. Themes for the future of artificial intelligence applications in art education

When examining the participants' views on the future of AI applications in art education, opinions suggesting a professional change in art education become more prominent. In the sub-theme of the future of teaching and art education, some participants discussed the potential impact of AI on the teaching profession. For instance, P1 expressed concern that AI could replace teachers, stating, "I think it will end the teaching profession" (p.3). Similarly, P40 highlighted that AI could change the relationship between the instructor and the learner, saying, "...in the near term, ideas can be taken from artificial intelligence in the field of art, and machines can make artworks" (p.3). In the sub-theme of new professional orientations, participants suggested that AI could reveal new skills and roles in art. P12 emphasized that AI will "...force designers to be process and system-oriented" (p.3), while P34 noted that "...new skills such as programming and data processing will need to be included in the curricula of art departments, underlining the urgency for adapting to the changing landscape of art education" (p.3).

Another central theme derived from participant views was ethics and social responsibility in art education. In this context, some participants emphasized that there may be ethical concerns and manipulation risks. For example, P24 warned that "manipulation can be done by interfering with the algorithms of AI platforms" (p.3), stating that misuse of AI can dull human intelligence. P19, in a compelling argument, emphasized the importance of ethical standards and said that "...ethical rules should be carefully regulated" (p.3). This emphasis on the importance of ethical standards in art education should make the audience feel the need for regulation. One of the prominent views was the commercialization and digitalization of art. P7 stated that the demand for university departments may decrease and argued that the changes created by AI in education may contribute to the commercialization of art (p.3). P9 expressed her concerns that AI could reduce art to a digital dimension and threaten classical art education (p.3).

Under the theme of AI application areas in art education, participants questioned its role in digital art practices and schooling. P11 (p.3) noted that AI can be effectively used in digital art education, citing its integration into a digital art applications course. P48 (p.3) emphasized the need for updated course content for AI applications. Regarding its impact on art fields, P29 (p.3) predicted radical changes in 2D and 3D animation, potentially rendering traditional methods obsolete. Similarly, P53 (p.3) highlighted that AI would dominate art and design processes beyond manual skills.

Under the theme of potential threats of AI on art education, the participants expressed their concerns that AI may hurt creative processes and decrease original works. P31 stated that this process could reduce the quality of artworks by saying, "Original works would decrease a lot" (p.3). In parallel, P41 stated that she "does not accept the products produced with AI as art" (p.3). Another view was that AI leads to laziness. Opinions were presented that AI could negatively affect students' creativity by providing convenience in art education. P26 argued that AI could be harmful without guidance and direction, stating that "it can affect students negatively if they are not guided correctly" (p.3). This underscores the importance of guidance in using AI in art education. Similar to the other opinion, P27



also stated that "AI will push teachers and learners who try to take the easy way out to laziness" (p.3).

Under the theme of redefining creativity in art education, the view that AI can reshape the concepts of art and creativity came to the fore. In this context, P32 drew attention to the effects of AI on art education and the definition of art by saying, "Answers will be sought again to the questions of what art is and for whom it is for" (p.3). In the same direction, P20 stated that "art education after AI will turn into an education that evaluates parameters." Another prominent view within this theme was that AI offers new forms of creativity. P55 emphasized that AI can develop new perspectives in art and that art education is dynamic (p.3). P17 expressed a hopeful vision about the subject, stating that he believed AI could create a "Renaissance effect" in art education and improve creative processes (p.3).

CONCLUSION

Most participants stated that AI positively contributes to their studies through convenience, innovation, and speed. However, they noted that course adaptation needs to be improved. The use rate of AI applications was high, mainly in departments closely related to digital tools such as graphic design, cartooning, and animation. However, it is noteworthy that these technologies are approached distantly in more traditional art branches, such as painting.

While the positive aspects of integrating AI technology into art education are numerous, including personalized learning and instructional support, real-time feedback and guidance, and a more efficient and individualized learning experience, there are also potential risks. As MuFan (2023, p. 65) highlights, the personalized learning facilitated by AI could lead to students becoming overly dependent on the system's guidance and feedback, potentially reducing their autonomy and creative thinking skills. Moreover, there is a real threat of misuse or leakage of students' personal information and learning data that needs to be carefully managed. Similarly, Zhai et al. (2023) state that over-reliance on AI dialog systems can inhibit the development of students' critical thinking and problem solving abilities.

Data misuse, authenticity problems, plagiarism risks, and violation of artists' rights cause intense debates. Turhan (2024, p. 274) sees the uncontrolled circulation and recording of billions of data about the world and the misleading production of data with artificial intelligence technologies as the most fundamental problems. A report by the US Department of Education cites protecting students' personal information, avoiding biased data sets, and algorithmic transparency as key areas of responsibility for technological integration (2023). Especially in expression-based disciplines such as art and design, such ethical issues can potentially undermine creative trust.

Authorship is one of the areas where discussions on artificial intelligence continue most intensely. Egemen Dericioğlu (2024, p. 256) stated that it is not easy to answer questions about who owns a work and that this uncertainty leads to problems in both legal and ethical dimensions. Regulations such as the European Union Artificial Intelligence Act aim to raise awareness of copyright infringements and ethical obligations. However, there is still no internationally agreed-upon regulation. Turhan (2024, p. 269) stated that hundreds of thousands of lawyers worldwide can define artificial intelligence. However, talking about a rapidly changing technology involves significant risks for a lawyer who cannot even predict half an hour to make certain judgments about a dark and hazy area. Another problem is that artists and designers are not encouraged to produce digital products in an environment where valuable intellectual products cannot be protected until the current regulations are made.

In the context of the implications of AI for art education, participants agreed that technology will inevitably create a transformation. As Roddy notes, humans increasingly live in a computer world, shaping our lives around it and performing most of our daily activities within an information space. As BC/ AI technologies reconfigure this digital landscape, they will reconfigure our lives and societies (2024, p. 68). participants emphasized the need to update educational methods and align curricula with AI technologies. However, this integration also stated that AI can be a supportive tool in art and design processes, but it is crucial to maintain the core values of art education. This emphasis on responsibility and commitment is significant for policymakers, as it underscores the need to ensure that AI does not undermine the fundamental principles of art education. Otherwise, there are concerns that AI may



weaken the core values of art education and harm students' creative processes. Similar results were obtained in the study conducted by Sáez-Velasco ao. (2024, p. 13). The study encourages taking advantage of the significant benefits offered by artificial intelligence while emphasizing that the ease of obtaining results should not hinder the learning of art and design theory.

In conclusion, AI has immense potential to inspire a sense of wonder and curiosity in art and design. Ethics, authenticity, and educational methods must be resolved as we navigate this transformative journey. Art education must develop a balanced approach to AI applications, treating them as opportunities and challenges.

REFERENCES

Chatterjee, A. (2022). Art in an age of artificial intelligence. *Front. Psychol, 13:1024449,* 1-9. https://doi.org/10.3389/fpsyg.2022.1024449

Egemen Dericioğlu, A. (2024). Hak ihlali yapmış pozisyona düşebilirler. In A. D. Yapay zeka ve sanat: araç mı amaç mı? (pp. 254-263). Ütopya Yayınevi.

Epstein, Z., Hertzmann, A., Herman, L.M., Mahari, R., Frank, M.R., Groh, M., Schroeder, H., Smith, A., Akten, M., Fjeld, J., Farid, H., Leach, N., Pentland, A., & Russakovsky, O. (2023). Art and the science of generative AI. *Science*, 380, 1110 - 1111. doi: 10.1126/science.adh4451

MuFan, K. (2023). Applications and challenges of artificial intelligence in the future of art education. *Pacific International Journal*, 6(3), 61-65. doi: 10.55014/pij.v6i3.405

Oksanen, A., Cvetkovic, A., Akin, N., Latikka, R., Bergdahl, J., Chen, Y., & Savela, N. (2023). Artificial intelligence in fine arts: A systematic review of empirical research. *Computers in Human Behavior: Artificial Humans, 1*(2), 100004. https://doi.org/10.1016/j.chbah.2023.100004

Özkan, M. (2024). Yapay zeka çağında etkili öğretim. Elma Yayınevi.

Roddy, S. (2024). Yaratıcı makine- İnsan iş birliği. In M. Filimowicz (Ed.), Yapay zeka ve yaratıcı çalışmanın geleceği - Algoritmalar ve toplum (pp. 55-84). The Kitap.

Sáez-Velasco, S., Alaguero-Rodríguez, M., Delgado-Benito, V., & Rodríguez-Cano. (2024). Analyzing the impact of generative AI in arts education: A cross-disciplinary perspective of educators and students in higher education. *Informatics*, 11(37), 1-14. doi: 10.3390/informatics11020037

Say, C. (2018). 50 Soruda yapay zeka. Bilim ve Gelecek Kitaplığı.

Spee, B. T. M., Leder, H., Mikuni, J., Scharnowski, F., Pelowski M. & Steyrl D. (2024). Using machine learning to predict judgments on Western visual art along content-representational and formal-perceptual attributes. *PLoS ONE*, 19(9), e0284567. https://doi.org/10.1371/journal.

Stork, D. G. (2024). Computer vision, ML, and ai in the study of fine art. *Communications of the ACM*, 67(5), 68–75. https://doi.org/10.1145/3633454

Şen Atiker, E. (2024). Güzel sanatlar ekseninde sorumlu yapay zekâ: potansiyel riskler ve etik boyutlar. *Reflektif Sosyal Bilimler Dergisi, 5*(1), 129–137. https://doi.org/10.47613/reflektif.2024.149

Turhan, N. (2024). Yarım saat içinde değişen bir teknolojiden söz ediyoruz. In A. D. Yapay zeka ve sanat - Araç mı amaç mı? (pp. 264-277). Ütopya Yayınevi.

U.S. Department of Education (2023). *Artificial intelligence and future of teaching and learning: insights and recommendations, Office of Educational Technology.*

https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf

Zhai, C., Wibowo, S. & Li, L.D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review. *Smart Learning Environments*, *11* (28), 2-37. https://doi.org/10.1186/s40561-024-00316-7