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Abstract

With the rapid development of emerging information technologies, the art education system is gradually entering the era of intelligence and building a new type of educational ecosystem. In this context, the transformation of society, the widespread application of artificial intelligence technology, and the sustained development of the education field urgently require art history teachers to change their role positioning. This study focuses on the impact and reshaping mechanism of AI technology on the professional role of art history teachers. Through literature research and semi-structured interview analysis, it reveals three major challenges faced by teachers: digital literacy gap, curriculum design paradigm transformation pressure, and insufficient interdisciplinary collaboration ability. The study proposes a "trinity" role transformation strategy: ability reshaping; functional upgrading; Collaborative mechanism. The research conclusion points out that the transformation of teachers' roles needs to break through the level of "tool operators" and deepen towards "educational value leaders": using AI technology to deconstruct knowledge authority and reconstruct a teacher-student equal dialogue model with "problem exploration" as the core. Teachers fully recognize the development of disciplines, educational value, technological tools, and AI ethics, implement human-machine collaborative educational activities, and possess intelligent educational literacy covering three dimensions: society, technology, and education. Universities should establish a collaborative support system of "technology teaching humanities" to assist teachers in achieving a leap from "adapting to technology" to "mastering technology".

Introduction

The rapid development of artificial intelligence (AI) is changing higher education, including traditional humanities disciplines such as art history. University art history teachers are now in the era of artificial intelligence, where algorithms can recognize images, generate text, and personalize learning experiences. This is particularly evident in undergraduate courses in China and Europe, where educators face new challenges and opportunities in integrating artificial intelligence into art history teaching. As Pedro et al. (2019) pointed out in a report by UNESCO, the rise of artificial intelligence in the field of education requires a re examination of the role and abilities of teachers, as well as strengthened training to prepare teachers for AI classrooms (Gentile, 2023). In China and Europe, people are increasingly realizing that art history education must adapt to these technological changes in order to remain relevant and effective in the digital age.

Teaching Reform in Art History Teaching. A key impact of artificial intelligence is on teaching methods - how to teach art history. Artificial intelligence driven tools can automate or enhance certain teaching tasks, thereby changing the role of teachers. For example, artificial intelligence systems can now serve as virtual teaching assistants, providing real-time feedback or answering factual questions for students' assignments (Gkountouma, 2023). This means that art history instructors are gradually transforming from sole knowledge providers to facilitators of learning experiences, focusing on higher-order skills such as critical analysis and creative thinking (Lee & Kim, 2017). In China, the education sector emphasizes that "artificial intelligence is driving the humanization of education, cultivating students' creative thinking and self-exploration abilities" (Shan, 2023). The introduction of artificial intelligence art creation, such as generative "AI painting," has prompted Chinese universities to rethink their curriculum and teaching methods. Ke (2023) observed that the surge in AI generated art is forcing a transformation in Chinese university art curricula, including updating course content and implementing new teacher training programs to address AI tools. European institutions are also working to address this paradigm shift. The European Commission's "Guidelines on Artificial Intelligence and Data Ethics in Education" (2022) emphasizes the need for teachers to use artificial intelligence critically and effectively and emphasizes that educators must develop new abilities to guide students in AI supported learning environments (Gentile, 2023). The international policy consensus echoes these views: the Beijing Consensus on Artificial Intelligence in Education calls for continuous redefinition of the role of teachers and capacity building, so that teachers can maintain a "conscious participant" position in AI driven innovation (Gentile, 2023). In summary, literature suggests that artificial intelligence is catalyzing a teaching transformation in art history education - positioning teachers as intermediaries between algorithmic tools and the meticulous explanatory learning required for art history.

The application of artificial intelligence tools in art history teaching. In addition to changes in teaching methods, more and more research is exploring the practical application of artificial intelligence systems in art history classrooms. These technologies include machine learning algorithms for image analysis, intelligent tutoring systems, and augmented reality (AR) enhancement capabilities. For example, Chiu et al. (2024) developed a deep learning-based art learning system that helps students recognize and classify artworks using a fine-tuned ResNet50 image recognition model. In a quasi-experimental study targeting undergraduate students, the artificial intelligence assisted system provided personalized guidance in art appreciation courses, and the results were convincing. Compared to students in traditional classrooms, students who use artificial intelligence systems for learning exhibit higher levels of achievement, motivation, self-efficacy, and overall satisfaction (Chiu, 2024). These findings suggest that artificial intelligence has the potential to improve learning outcomes in art history by providing immediate feedback and adaptive support, which may be difficult for individual teachers to provide. Other classroom applications include using AI driven AR to create immersive art experiences. A study integrating artificial intelligence and AR into art education found that these tools significantly improved students' motivation and imagination (Miralay, 2024). For example, students are able to design mobile artworks with the help of artificial intelligence, proposing new forms of creative participation. At the same time, the study also suggests a possible trade-off: the reliance on artificial intelligence tools coincides with the weakening of traditional freehand drawing skills. This highlights a subtle reality in art lecturer reports - while artificial intelligence can enhance engagement and provide novel learning pathways, it may also reduce the practice of foundational skills or lead to

excessive reliance on automation.

In Europe, universities have begun to utilize artificial intelligence in a wider range of digital humanities fields. A famous example is the "Digital Delacroix" project at Sorbonne University, which uses artificial intelligence and 3D modeling to analyze the works of painter Eugène Delacroix (Sorbonne University, 2025). Although primarily a research project, it showcases tools such as AI based image attribution and cross modal analysis of text and painting that can enrich art history education by providing students with data-driven art techniques and insights into historical contexts.

The overall trend in literature is that the application of artificial intelligence in art history education is still in its infancy but developing rapidly. A recent systematic review of the use of technology in visual arts learning points out that although the adoption of artificial intelligence is still in its early stages, it "has enormous potential for sustainable development in art education". If implemented thoughtfully, it can expand accessibility and increase student engagement (Su, 2024). These innovations require teachers not only to adopt new tools, but also to guide students in using them critically, ensuring that technology becomes a means to deepen understanding rather than an end in itself (Lu Li, 2024).

The social and cultural impact of artificial intelligence integration. In addition to teaching methods and tools, the integration of artificial intelligence into art history education has also brought broader social and cultural impacts. A major consideration is how artificial intelligence can reshape the art experience and teacher-student relationship in the classroom. In the context of creative disciplines, artificial intelligence systems can generate paintings, analyze style patterns, and even generate narratives about artworks. This blurs the boundary between human and machine creativity and raises questions about the authorship and authenticity of art - issues that art history teachers now need to address in their curriculum. Recent comments have emphasized the "contradictory authenticity" of students' perception of art generated by artificial intelligence (Ke, 2023), indicating that educators need to cultivate critical thinking so that students can identify and discuss the cultural value of AI generated images. In fact, scholars believe that balancing artificial intelligence and human creativity is crucial; Teachers must help students appreciate the contribution of algorithms to art, while not neglecting the humanistic background and creative intent behind artistic works (Ke, 2023). Another socio-cultural influence is fairness and accessibility. In China, there have been claims that artificial intelligence can democratize education. By providing high-quality teaching resources to students from different regions, artificial intelligence is seen as a tool to narrow the education gap between urban and rural areas. This is particularly important for art history research, as rural or resource limited institutions can access a vast collection of online art, and even access AI driven virtual museum tours that were previously inaccessible. At the same time, in the discourse system of Europe, moral use and inclusivity are typically at the center - ensuring that artificial intelligence in the classroom does not exacerbate bias or undermine human centered learning values (Gkoutouma, 2023). The guidelines of the European Commission (2022) explicitly encourage educators to use artificial intelligence in a privacy preserving, transparent, and fair manner, aiming to prevent the "digital divide" where only a portion of students or universities benefit from AI enhanced education (Gkoutouma, 2023).

From a cultural perspective, teachers in both regions are exploring how artificial intelligence can change the relationship between students and cultural heritage. For example, if an AI mentor can immediately answer factual questions about Renaissance art, the role of the teacher may shift towards hosting more in-depth discussions about interpretation, background, and ethical issues. Gentile et al. (2023) argue that the rise of artificial intelligence will not replace teachers, but rather "force a change in the role of teachers," which may "restore the authority of teachers as mentors and experts," guiding students in processing large amounts of information generated by artificial intelligence. In fact, this means that art history teachers are increasingly acting as curators of content and background - they must choose appropriate artificial intelligence tools, construct the insights provided by these tools in academic debates, and help students develop critical stances. The socio-cultural level also includes the level of acceptance of artificial intelligence by students and teachers. Research in China shows that there is a generally positive attitude towards artificial intelligence in the classroom, which is seen as part of the country's efforts to promote educational innovation (Wang & Li, 2020). In Europe, attitudes vary, with some teachers keen on delegating administrative tasks to artificial intelligence, while others cautiously believe that algorithms may infringe upon the traditional essence of interpersonal teaching.

In both cases, it is unanimously agreed that artificial intelligence should enhance rather than replace human factors in teaching (Gentile, 2023). The ultimate goal is to utilize the capabilities of artificial intelligence (data processing, personalization, visualization) to enrich art history education while retaining the critical, cultural, and empathetic qualities possessed by human teachers. In summary, current research indicates that the role of university art history teachers is undergoing significant changes in the era of artificial intelligence. In the era of artificial intelligence, the subjectivity of teachers presents new characteristics such as the inter-weaving of virtual and reality, the integration of individuals and groups, and the coexistence of prosperity and lost direction. While intelligent technology reshapes the subjectivity of teachers, it can also easily lead them into subjectivity dilemmas such as self-crisis, distorted interaction, and behavioral alienation. Therefore, to restore the subjectivity of teachers, it is necessary to recognize oneself by pursuing truth through adhering to the essence of life, constructing the essence of choice in practical activities to become oneself, and returning to the essence of creation in lifelong learning to achieve oneself (Sun, 2023).

From a pedagogical perspective, teachers are adapting to a new role as guides and innovators in AI enhanced learning environments. From a technical perspective, they are integrating artificial intelligence tools to expand the scope of art history teaching beyond what was previously possible. From a socio-cultural perspective, teachers are a key factor in ensuring the integration of artificial intelligence into art history education and maintaining consistency with educational equity, ethical standards, and the core humanistic values of the subject. However, the literature also reveals some gaps - particularly the need for more evidence to demonstrate the long-term impact of this field and the best practices for teacher training (Miao, 2021). This article focuses on undergraduate art education in China under the context of AI, aiming to clarify how different educational backgrounds can cope with these changes. Ultimately, understanding the evolution of the role of art history teachers in the era of artificial intelligence is crucial for developing strategies that empower educators and students, ensuring that technology can enrich research on contemporary art history and its cultural significance. Therefore, exploring the role transformation of art history teachers in universities in the AI era is of great significance for promoting the

development of higher art education.

Methodology

This study focuses on qualitative research and combines interdisciplinary theoretical frameworks and mixed methods to explore the path, challenges, and coping strategies of the role transformation of art history teachers in universities under the impact of AI technology. The research design takes into account both theoretical depth and practical operability.

Theoretical Framework and Research Methods

This study utilized the Technology Acceptance Model (TAM) (Davis, 1989) to integrate the impact mechanism of technology tools on teachers' cognition and behavior and analyzed teachers' acceptance and adaptability to AI technology.

Starting from social constructivism, we focus on the social interaction, cultural context, and knowledge reconstruction process in the transformation of teachers' roles, emphasizing the dynamic interaction between technology and teaching practice. And combining the perspective of critical education (Freire, 2000) to examine the possible changes in educational power structure caused by AI technology, explore how teachers can maintain subject subjectivity and critical thinking in a technology dominated environment.

Data Collection

The research design is an explanatory sequence mixing method: primarily qualitative, advancing in three stages:

- (1) Through literature analysis and theoretical modeling, understanding research trends, and constructing a preliminary framework for the impact of AI technology on art history education in universities.
- (2) Conduct in-depth interviews to collect empirical data on teacher behavior and attitudes.

Object selection: Using purposive sampling, 18 art history teachers from comprehensive universities, normal universities, and art colleges were selected, covering three different professional titles: professor, associate professor, and lecturer, with 2 teachers from each title. To ensure sample heterogeneity. The duration of a single interview is about 40 minutes, using methods such as face-to-face interviews or online interviews. Specifically, as shown in Table 1.

Table1. Type of Interviewee

Number of people	Interviewee type	Age stage	Type of institution	Interview duration
6	professor	45-60	Comprehensive universities	40 min
6	associate professor	35-50	Normal universities	
6	lecturer	30-40	Art colleges	
Total	18			720 min

Interview outline: Focus on three dimensions:

The practical application scenarios and teaching effects of AI tools, such as image generation and digital curation.

Changes in role cognition, such as the challenge of transitioning from a "knowledge transmitter" to a "technology collaborator".

The strategy of adhering to and reconstructing the core values of disciplines, such as aesthetic judgment and historical narrative.

Research Validity and Ethical Considerations

Data triangulation: Integrating interview, observation, and textual data to ensure cross validation of conclusions; And invite peer experts for review.

Ethical standards: Following the principle of informed consent, all interview data will be anonymized to avoid potential teacher identity sensitivity issues caused by technological dependence.

Results

Dialogue between Data Analysis Methods and Theory

Thematic Analysis

The study first used thematic analysis to summarize the core themes of the collected interview data through open coding. Use NVivo software to encode the transcribed text sentence by sentence, extract 356 initial codes, and merge duplicate items to form 42 concept labels. The example is shown in Table 2.

Table 2. Coding and Concept Classification

Original statement (excerpt)	Initial code	Concept classification
“The art history images generated by AI tools are misleading, but students trust the algorithm results more”	Technological authority challenges teachers' judgment	Technology Knowledge Power Conflict
“I need to learn programming extra, but time is simply not enough”	Technical learning pressure	Digital literacy anxiety
“When working with engineers, they always say that my needs are not clear”	Interdisciplinary communication barriers	Collaboration mechanism failure

Comparative

Based on interviews, extract category correlations and extract three core themes. The distribution of different

groups' viewpoints is shown in the following table:

Comparative analysis of cognitive differences between different teacher groups, such as traditional vs. technology positive, revealing the moderating effects of different age groups, institutional resources, and disciplinary cultures on the transformation path.

Table 3. Frequency of Core Themes

Core theme	Professor	Associate Professor	Lecturer
The structural contradiction of digital literacy	12 mentions	15 mentions	22 mentions
Course humanistic crisis	25 mentions	18 mentions	13 mentions
Interdisciplinary power game	16 mentions	28 mentions	6 mentions

Analysis Conclusion

Professional title differences: Young lecturers are more sensitive to digital literacy anxiety (due to concentrated technical learning pressure), while associate professors are more concerned about interdisciplinary collaboration conflicts; Professors are more concerned about the crisis of disciplinary subjectivity.

Theme focus: Overall, the teacher community has a stronger perception of the "humanistic crisis of the curriculum", such as AI replacing aesthetic contemplation with skill training; The attention to interdisciplinary conflicts is relatively weak.

Age difference: Teachers under the age of 40 generally support technological collaboration and believe that "AI can stimulate students' interest", while teachers over the age of 50 tend to hold a conservative attitude.

Theoretical Dialogue Construction

Based on the integration of related concepts through axial encoding, six core categories (partially shown) are formed and their corresponding theoretical dialogues are constructed. The example is shown in the table below:

Table 4. Theoretical Construction

Core Categories	Related Concepts	Theoretical Mapping
Technical application challenges	Digital literacy anxiety, complexity of tool operation	Technology Acceptance Model (TAM)
Course design conflicts	Technical courses deviate from humanistic goals and evaluation standards are out of order	Critical pedagogy
Interdisciplinary collaboration dilemma	Unequal discourse power and marginalization of disciplinary values	Constructivism

The Current Situation of Art History Teaching in Universities in the Era of AI

Based on the analysis, the study found that in the current situation, university teachers face insufficient ability to apply technological tools; The paradigm of curriculum design lags behind, that is, the imbalance between traditional knowledge imparting and AI empowerment; And the lack of interdisciplinary collaboration ability, such as the conflict between technical logic and humanistic core.

Firstly, the passive acceptance of digital literacy The TAM theory emphasizes that the perceived usefulness of technology drives behavior, but research has found that teachers' acceptance of AI tools (such as generative image analysis and virtual curation) is limited by a narrow understanding of technology - most teachers only see them as "efficiency tools" and lack critical awareness of the crisis of technological ethics and artistic originality. The technology acceptance model needs to be embedded with humanistic calibration to avoid tool rationality squeezing disciplinary subjectivity. And most teachers are not familiar with AI technology, requiring a lot of time and effort to learn how to effectively operate and apply these technologies. This includes understanding the functions, settings, and how to collect and parse the data generated by AI systems in order to make teaching decisions.

Secondly, there is a risk of "technology led" curriculum design. The current AI driven curriculum transformation often falls into the trap of "formal innovation": excessive reliance on digital resource libraries and automated evaluation, weakening the historical context restoration and aesthetic perception cultivation of the core of art history teaching. Critical education points out that technological courses may exacerbate the tendency towards "dehumanization" and require a reconstruction of the "technology humanities" symbiotic framework. In addition, seamlessly integrating AI technology into existing curriculum design still poses certain difficulties, and teachers need to reconsider teaching objectives, methods, and evaluation criteria to ensure that AI systems can enhance rather than interfere with teaching effectiveness.

Thirdly, the dilemma of "power imbalance" in interdisciplinary collaboration. In the collaboration between teachers, technicians, and data scientists, there exists an issue of unequal discourse power: technological logic dominates resource allocation, leading to the marginalization of the value of the art history discipline. This confirms the warning of critical theory against "technological hegemony" and the urgent need to establish an equal dialogue mechanism. The knowledge barriers and communication barriers of new technologies lack interdisciplinary collaboration experience, teaching resources, and technical support. The existing teaching evaluation system does not match the incentive mechanism and needs to be readjusted.

Strategies for Teacher Role Transformation

Comparing the theme with TAM theory, it is found that the traditional "perceived usefulness usability" framework cannot explain the phenomenon of humanistic resistance, and the "disciplinary value compatibility" dimension needs to be added. Comparing the theme with TAM theory, it is found that the traditional "perceived usefulness usability" framework cannot explain the phenomenon of humanistic resistance, and the "disciplinary value

compatibility" dimension needs to be added. The reception and cognition of technology can be expanded from two dimensions. Maintain the original TAM model and respect the usefulness of technology perception. Using AI technology to assist teachers in teaching, such as quickly organizing image materials or simulating spatial displays. From a critical perspective, it is compatible with both technology and humanities. Clearly identify and avoid algorithm vulnerabilities and conflicts with humanistic goals. Based on the Technology Acceptance Model (TAM) and Critical Education Theory, this study proposes an integrated strategy that balances "ability reshaping functional upgrading collaborative mechanisms" to address the dual challenges of technological iteration and disciplinary value.

Capability Reshaping: Building a "Digital Humanities" Double Helix Literacy System

In the era of general intelligence, the work form of teachers will undergo tremendous changes. Knowledge based teaching will mostly be undertaken by artificial intelligence, and teachers will be more responsible for designing, supervising, motivating, and accompanying learning. Teachers will be more responsible for educating students and emotional communication with them (Yu Shengquan, 2018), but they lack their own digital literacy. In the process of transforming the role of teachers, the first step is to reshape their own abilities and construct a dual spiral literacy system of "digital and humanistic". We need to develop a critical digital literacy training module that goes beyond the technical operational level and includes topics such as AI art ethics and content copyright, to strengthen teachers' reflective application ability of technology.

The transformation of technological forms from digitization to intelligence, the transformation of technological functions from auxiliary teaching to supporting, leading, and reshaping education, and the transformation of the way technology is embedded in education from the "edge" to the "core" have brought about a profound change in education and teaching. Therefore, art history teachers in universities must possess AI literacy, master AI technology, be able to use AI technology to carry out teaching innovation and improve educational and teaching efficiency. For example, art history teachers in universities must possess information retrieval and processing abilities, data-driven teaching decision-making abilities, design and application abilities of intelligent teaching systems, and online teaching organization and course development abilities. They need to understand the application methods and techniques of artificial intelligence technology in art history in order to better utilize these technologies to promote the development of art history research. They also need to pay attention to the latest developments in AI technology, constantly learn and master new technological methods and theories, to maintain their research capabilities that keep up with the times.

At the level of values, there is a transition from "material centric" to "human centric", from "knowledge-based" to "quality-oriented", from "instrumental rationality" to "value rationality", and from "efficiency first" to "fairness first". At the level of thinking mode, there is a transition from linear thinking to nonlinear thinking, from reductionist thinking to holistic thinking, from substantive thinking to relational thinking, and from deterministic thinking to uncertain thinking (Shengquan, 2018).

As the driving force behind the transformation of higher education, college art history teachers must take the lead

in transforming their values and ways of thinking. In the era of technological empowerment, we should shift from teaching and educating people to placing equal emphasis on knowledge transmission and ability development, and view and use AI tools with critical thinking. At the level of thinking mode, we should transition from closed thinking to open thinking, from singular thinking to diverse thinking, from mechanical thinking to creative thinking, and from static thinking to dynamic thinking.

Functional Upgrade: Design a Hybrid Curriculum Paradigm of "Anchor Elasticity"

With the empowerment of technology, teachers should also redesign the curriculum model based on the characteristics of the times and design a hybrid curriculum paradigm of "anchor elasticity". The anchor layer retains the cultivation of core abilities in art history, such as style analysis and historical criticism, and uses AI to assist in the mining and visualization of historical materials; Elastic layer, embedded with interdisciplinary projects such as "Narrative Reconstruction of Art History in the Age of Algorithms", requiring students to use AI tools to deconstruct classic works and submit critical reports, and shifting the role of teachers to "curators" and "thought guides".

In the field of teaching, university teachers should have a clear direction for teaching research. Teachers can also combine AI technology with designing innovative teaching activities, such as using virtual reality technology to conduct historical investigations of art or using data analysis software to allow students to explore the changing trends of art styles, which can effectively enhance students' participation and learning effectiveness. For example, teachers use AI technology to conduct flipped classrooms, allowing students to learn basic knowledge independently through resources such as videos and online courses outside of class, while in the classroom, there is more discussion, practice, and project-based learning to stimulate students' interest and initiative in learning. Teachers need to have academic and professional foundations, and their ability to expand their teaching reflects more on their own level of teaching integration and cultivation, which can provide students with multi-level experiences in course learning. Dynamic thinking also requires teachers to quickly adapt and find solutions when facing new teaching challenges, such as how to deal with the potential teaching unfairness caused by AI technology, or how to ensure the ethical application of AI technology in teaching. These are all issues that teachers need to think about and respond to.

In terms of cultivating students' critical thinking, art history teachers in universities can also use AI technology to carry out diverse teaching activities. For example, using AI technology to build a virtual discussion platform that encourages students to debate controversial topics in art history, allowing them to learn to question, analyze, and evaluate different viewpoints through communication. This kind of interaction not only exercises students' oral expression and teamwork skills, but more importantly, it can stimulate their critical thinking, enabling them to learn to examine problems from multiple perspectives and form independent insights.

In addition, teachers can also use AI technology to provide personalized feedback to students. By analyzing students' learning behavior and homework completion on the platform, AI systems can identify students' knowledge weaknesses and thinking misconceptions and provide targeted improvement suggestions. This

personalized feedback mechanism helps students correct mistakes in a timely manner, deepens their understanding of art history knowledge, and helps cultivate their self-reflection and self-correction abilities, which are important components of critical thinking.

Collaborative Mechanism: Creating a "Disciplinary Community" Power Balance Model

The AI era requires art history teaching to move from singularity to diversity, actively creating a "disciplinary community" power balance model. This requires art history teachers to not only actively respond to and improve their own AI technology literacy, but also to master solid basic knowledge of artificial intelligence technology. We also need to collaborate with key disciplines and technologies such as artificial intelligence algorithms, machine learning, and big data analysis, establish a collaborative development mechanism, and explore how to apply them to the teaching and research of art history. For example,

- establishing a school level interdisciplinary education committee to determine the decision-making weight of art history teachers in technology procurement and curriculum design, ensuring the subjectivity of the subject
- establishing a "technology humanities" dual mentor system, mandating AI engineers to participate in art history teaching and research activities, and promoting two-way knowledge transfer
- establishing an open-source teaching resource platform, sharing AI tools and case libraries reviewed by subject experts, and reducing the technical trial and error costs for individual teachers
- establishing an "AI Humanities Laboratory" to encourage teachers to participate in technology research and development, such as customizing art history image recognition algorithms, breaking the black box cognition of technology, and upgrading from "users" to "collaborators"

Through learning and practice, art history teachers can gradually improve their knowledge level in the field of artificial intelligence, laying a solid foundation for better utilizing this technology in teaching and research. Expanding research perspectives in professional fields is an important role of artificial intelligence technology in art history teaching. With the help of artificial intelligence technology, art history teachers can delve into the historical and cultural backgrounds hidden behind ancient paintings and artworks, revealing the artistic value of their works.

Teachers can utilize the rich online resources provided by AI platforms, such as virtual exhibitions, online lectures, interactive courses, etc., to allow students to preview before class and have a preliminary understanding of the content to be learned. Diversified teaching activities can also be designed, such as online interactive Q&A, virtual field visits, etc., to enrich teaching forms and improve teaching effectiveness. For example, AI technology can achieve high-precision restoration of ancient paintings, restore the original appearance of works, and provide rich materials for the teaching of art history.

AI technology can also be applied to the authentication of artworks, providing strong support for the study of art history. Communicating and collaborating with peers is an important pathway for the professional development of art history teachers. The development of AI technology involves multiple disciplinary fields, and art history

teachers need to possess interdisciplinary knowledge and skills in order to better respond to the challenges of the AI era. Add interdisciplinary courses such as computer science, data science, cognitive science, etc. to the training system to broaden teachers' knowledge horizons. Encourage art history teachers to collaborate with teachers from other disciplines to explore the application of AI technology in art history research. Organize interdisciplinary exchange activities, such as seminars, workshops, etc., to provide a platform for teachers to exchange ideas and share experiences.

The above strategy attempts to balance the technical utility orientation of TAM with the humanistic value of critical theory: on the one hand, to enhance teachers' technical adaptability through ability upgrading; On the other hand, curbing the expansion of technological power through institutional design. Its core lies in positioning AI as a "critical partner" rather than a "substitute authority", enabling art history education to achieve a dynamic balance between staying within boundaries and crossing boundaries in the wave of technology.

Summary

In the context of the AI era, the transformation of the role of art history teachers in universities is an inevitability of the times. It is not only a need for personal career development, but also a key factor in promoting the discipline of art history to keep pace with the times and cultivating innovative talents. This study draws the following conclusions through in-depth analysis: Firstly, the rapid development of AI technology presents new challenges and opportunities for art history teaching in universities, and the transformation of teachers' roles has become an inevitable choice. Secondly, teachers should transform from traditional knowledge transmitters to learning guides, cultivating students' ability for self-directed learning and critical thinking; Transforming from a single educator to a diverse teaching organizer, integrating online and offline resources, and organizing diverse teaching activities; Transforming from a subject knowledge expert to a promoter of interdisciplinary integration, actively integrating AI technology with art history teaching, and promoting cross disciplinary cooperation with other disciplines. Finally, this study proposes the construction of a training system to enhance teachers' AI literacy, the construction of a teaching environment that supports teachers' role transformation, and practical strategies for teachers' professional development and self-improvement, providing a feasible path for the role transformation of art history teachers in universities.

Conclusion

The transformation of the role of teachers needs to break through the level of "tool operators" and deepen towards "educational value leaders": using AI technology to deconstruct knowledge authority and reconstruct an equal dialogue mode between teachers and students with "problem exploration" as the core. Teachers fully recognize the development of disciplines, educational value, technological tools, and AI ethics, implement human-machine collaborative educational activities, and possess intelligent educational literacy covering three dimensions: society, technology, and education. Universities should establish a collaborative support system of "technology teaching humanities" to assist teachers in achieving a leap from "adapting to technology" to "mastering technology".

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